# € 19. Figure 19. <



MAGNETOM Free.Max\* breaks barriers to expand the reach of MRI. Introducing the world's first 80-cm patient bore and High-V MRI, MAGNETOM Free.Max redefines MRI accessibility and opens up new clinical opportunities. \*The product is pending 510(k) clearance, and is not yet commercially available in the United States. Its future availability cannot be guaranteed.

### **MAGNETOM Free.Max**

## **Breaking barriers**

siemens-healthineers.com/magnetom-free-max



MAGNETOM Free.Max<sup>1</sup> breaks barriers to expand the reach of MRI. Where patients have felt discomfort, the world's first 80 cm bore sets a new paradigm in patient comfort. Where infrastructure was an obstacle to MRI, MAGNETOM Free.Max slots into an existing helium-free infrastructure. Where access to MRI was not viable, MAGNETOM Free.Max makes access affordable. And where conventions have limited our thinking, MAGNETOM Free.Max breaks out of conventions to explore new clinical opportunities in MRI.

<sup>1</sup> The product is pending 510(k) clearance, and is not yet commercially available in the United States. Its future availability cannot be guaranteed.





## Dear Reader,

in the first year of the pandemic start-up companies in particular showed how effectively AI algorithms can support the diagnosis of COVID-19. When many human physicians simply lacked experience diagnosing a corona infection the AI software took only seconds to recognize it.

The pandemic, moreover, highlighted the importance of interlinked and mobile structures to be able to maintain the healthcare system in times of crisis. What's to be done when the radiologist is in quarantine and the team's workload is ever increasing due to more physicians and more patients being ill? The answer many radiology departments opted for: home office and mobile solutions that allow the specialists to access images and reports from anywhere.

A clear trend towards increased mobility can also be observed with regard to examination equipment. Mobile DR systems were hard to come by even at the beginning of the pandemic and in the course of the year more and more CT scanners where taken on the road – in the very literal sense – to quickly increase diagnostic capacities where needed.

With this new issue of the RADBook we want to highlight once more the innovative and performant solutions companies come up with to support radiologists in their daily work.

Stay safe and enjoy reading!

Your editorial team
Daniela Zimmermann and Guido Gebhardt

Editorial Trends & Topics First installations of Dunlee liquid metal bearing CT replacement tubes in the US. Canon Medical: Providing mobile solutions for the COVID-19 frontline Febromed: Get up – The swivelling handle system for radiology X-core MRI: Significant advances in medical physics Siemens Healthineers: Moving the needle in MRI productivity. Medigration: Intelligent IT – Online appointment scheduling for optimum equipment utilization in real-time.	
Hologic: Advancing the breast continuum of care	
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## the next level in diagnostic imaging



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ECHELON Smart Plus The enlightened choice for high productivity and diagnostic power

ARIETTA 750 Advanced diagnostic performance at a flexible price high productivity and diagnostic power

APERTO Lucent Plus Prime Permanent

Open MRI scanner with SynergyDrive



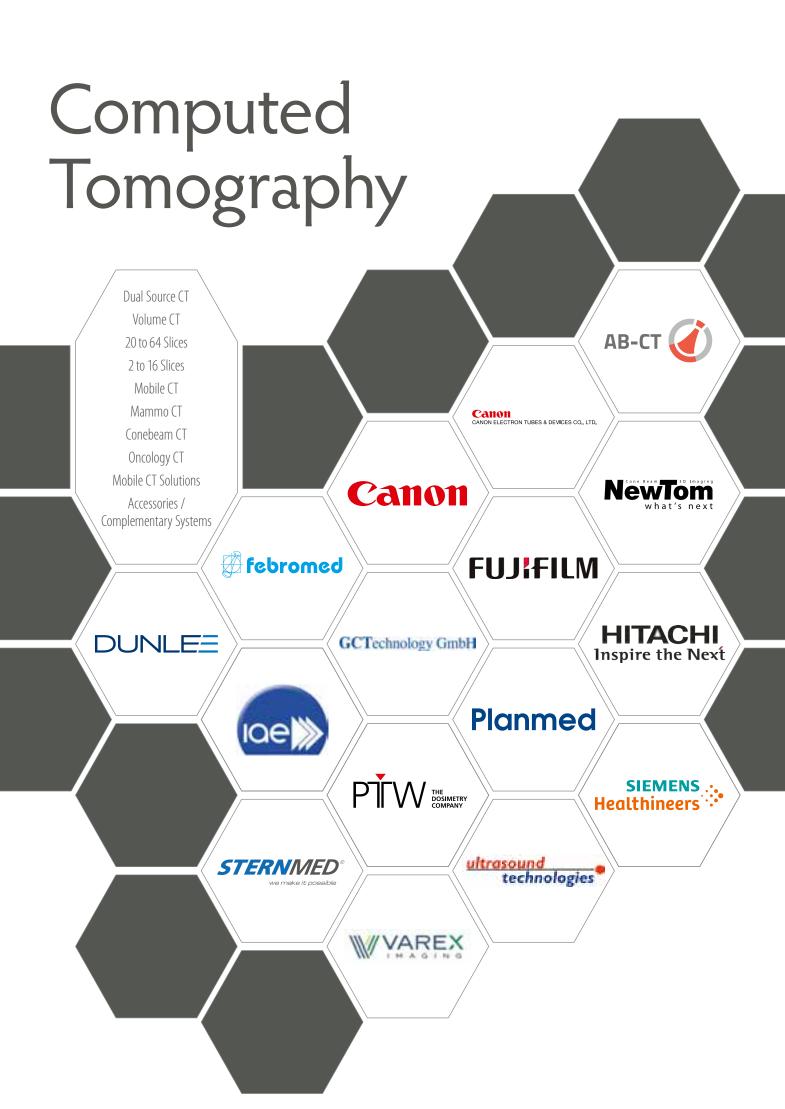
SUPERBERGE SUPERBERGE

### curious to find out how we take patient care to the next level?



browse & let's talk

C Hitachi Medical Systems Europe Holding AG, Switzerland Sumpforese 13, 6312 Steinhausen, Switzerland



#### **Dual Source CT**

Siemens Healthineer	s · Somato	om Force	
Power 240 kW	Gantry bore 78 cm		Scan speed Up to 737 mm/s
<ul> <li>Highlights</li> <li>Bring image quality to th with Vectron X-ray tube</li> <li>Significantly reduced cor media amounts required imaging</li> <li>Ultra low dose and "free- CT with outstanding nat</li> </ul>	ne next level htrast I with low kV breathing"	E T	
resolution • FAST Integrated Workflow 3D Camera to get two st patient positioning		• Dynamic in	e Dual Energy naging up to 80 cm esolution: 66 ms (full body)

#### Volume CT

Canon · Aquilion One / Prism Edition				
Power 100 kW	Gantry bore 78 cm		Scan range 150/200 cm	
Highlights • Advanced intelligent Clear-IQ Engine (AiCE • Artificial intelligence		Ć		
and processing	aina ahain	Lateral table		
PUREVISION Optics ima     0.275 s rotation	ging chain	300 kg patie     SEMAR (Me	tal Artefact Reduction)	
• 16 cm coverage			of Cardiac and Spectral	

- 640 slices/rotation
- 0.17 mm spatial resolution
- SURE Position patient centring
- applications
- Isophasic organ perfusion
- CT Fluoroscopy

200 kW	Gantry bore 78 cm	<b>Scan speed</b> Up to 458 mm/s
Highlights Tin Filters – a new bring CT doses to in a routine X-ray Straton MX Sigma High Power 70 & 8 doses with consist 10 kV Steps allow precise dose value	those expected series X-ray tube with 0 enables lower ent image quality for the most	
• FAST Integrated W FAST 3D Camera of		Dual Source Dual Energy     Dynamic imaging up to 48 cm

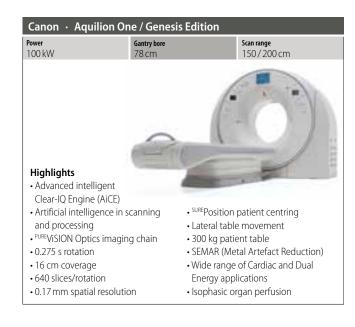
FAST 3D Camera drives precision in patient positioning



- 16 cm coverage • 640 slices/rotation
- 0.17 mm spatial resolution
- SURE Position patient centring
- Wide range of Cardiac and Spectral

Temporal resolution: 75 ms

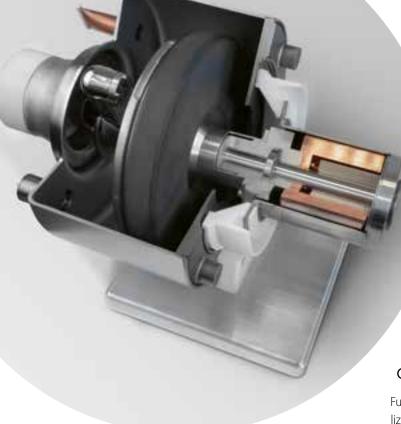
- applications
- Isophasic organ perfusion
- CT Fluoroscopy





#### Tubes available in USA and Europe for Revolution Evo and Optima CT660

## First installations of Dunlee liquid metal bearing CT replacement tubes in the US



Dunlee announces that it has successfully installed its first CT replacement tubes with liquid metal bearing (LMB): the new DA200P40+LMB tube with Dunlee CoolGlide technology. Prior to this first installations, the DA200P40+LMB tube with Dunlee CoolGlide technology was rigorously tested at both Dunlee's facility and on independent external gantries to confirm that it will perform reliably in both GE Revolution Evo and Optima CT660 CT scanners.

"Having an alternative helps our customers – and the patients and hospitals they serve – in offering affordable healthcare, and allows them to choose their partner of trust. We are pleased to have this CT replacement tube with liquid metal bearing now available with verified compatibility," says Alexander Eitel, Head of Marketing & Business Development. Eitel adds that while initially, the DA200P40+LMB tube will only be offered for the GE Revolution Evo and Optima CT660 CT scanners, future plans include validation for additional GE scanners.

#### Manufactured in the USA

All DA200P40+LMB tubes are manufactured in Illinois, USA with imported parts. The Liquid Metal Bearing with CoolGlide is designed and manufactured in Germany, based on knowledge gained from over 30 years of LMB technology development and over 100,000 LMB units sold worldwide. It was developed by the research and development team that was the first in the world to bring LMB technology to the X-ray market in 1989.

#### Global distribution planned

Future plans include global distribution. Dunlee also plans to finalize registration for Canada and the Middle East region in the first half of 2021, followed by a product launch in China in 2022.

#### Choose your partner

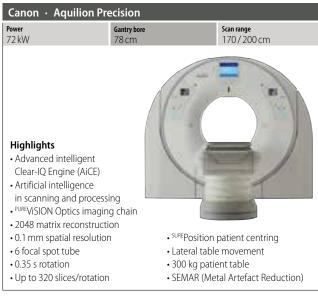
With Dunlee's high-quality replacement tubes at a competitive price, you can manage costs and maintain scanner uptime. Partner with Dunlee for reliable tubes, friendly service and outstanding support. www.dunlee.com

#### About Dunlee

Dunlee has over 100 years' experience in developing, producing and integrating innovative components for imaging systems. Serving both the OEM and replacement markets, Dunlee offers a comprehensive portfolio of reliable X-ray tubes, high voltage generators, detectors and

product packages for CT, as well as solutions for interventional radiology, MRI and nuclear medicine. It offers support during development and throughout the product lifecycle, contributing to its customers' efficient production and go-to-market strategies.

#### Volume CT



Canon · Aquil	ion Prime SP	
<b>Power</b> 72 kW	Gantry bore 78 cm	<b>Scan range</b> 150/200 cm
Highlights • Advanced intelli	gent	
Clear-IQ Engine • Artificial intellige		<ul> <li>Up to 160 slices / rotation</li> <li><sup>SURE</sup>Position patient centring</li> </ul>
and processing <ul> <li>PURE ViSION Optics</li> </ul>		Lateral table movement     300 kg patient table
<ul><li>0.23 mm spatial</li><li>0.35 s rotation</li></ul>	resolution	SEMAR (Metal Artefact Reduction)     Iterative 3D Fluoro
<ul> <li>4 cm coverage</li> </ul>		<ul> <li>Low dose cardiac scanning</li> </ul>



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## Providing Mobile Solutions for the COVID-19 Frontline

With public health issues continuing to make daily mainstream news headlines across the world, it is clear how much change the healthcare environment is going through. Not only are there existing pressures on resources, space, staff, certain procedures, and budgets, but there are brand new ones resulting from the ongoing global COVID-19 pandemic. This has led to an even greater need for flexibility, affordability, and rapid response in medical imaging solutions.



The Mobile Trailer is developed with the highest safety regulations in mind to ensure a comfortable environment for patient and staff. It features a generous working area, including a separate control room, specified to GDPR regulations, with air conditioning, patient monitors, outside surrounding monitors, telephone and PACS connections, contrast control panel, comfortable chairs for the operators and privacy glass. It also features a spacious scan room, which is fully air-conditioned and can be monitored easily. Wall and ceiling art, dimmable lighting that can be changed to different colors, and calming music, help the patient feel more comfortable and relaxed during their examination.

The trailer is equipped with an Aquilion Prime SP with Advanced intelligent Clear IQ Engine (AiCE), Healthcare IT Vitrea Advanced Visualization, Bayer/ MEDRAD Stellant D Dual Syringe CT Injection System, Huntleigh LifePulse ECG-monitor, and contrast oven. The wide bore medical equipment provides

a non-claustrophobic experience for the patient. Patients restricted to beds can be maneuvered into the trailer via the patient lift. The trailer has a waiting and dressing room, washing facility, panic button, and a separate stair entrance for mobile patients.

This mobile imaging solution can provide excellent support for customers to meet peaks in demand, extend capacity for a longer period, cover a period of planned downtime, or as a rapidly deployed back-up. The deployment model ensures that the trailer can be quickly transported to wherever needed. Before delivery, Canon Medical carries out a site survey to ensure seamless installation prior to delivery.

The aim is to always ensure 100 percent uptime and 100 percent satisfaction through Canon Medical's outstanding European customer and service support. Renting equipment such as this Mobile Trailer, enables clinical teams to access the latest technological developments and enhancements, while the responsibility for servicing the equipment lies with Canon Medical, as per the rental agreement. Renting equipment can be a rewarding solution to fulfil immediate clinical needs while avoiding larger capital investments.

Want to know more about the Mobile Trailer? Discover all the details of this Mobile Imaging Solution in the Computed Tomography section or contact us via eu.medical.canon



#### Volume CT

Siemens Healthineers · Somatom X.cite			
Power 105 kW	Gantry bore 82 cm		Scan speed Up to 218 mm/s
			÷
<ul> <li>Highlights</li> <li>myExam Companion is a approach in CT operation ered by Al, designed to c the exam to the individu</li> <li>Patient-friendly design w 82 cm bore and a tablet-mobile workflow to max patient proximity.</li> <li>FAST 3D Camera drives pr patient positioning</li> </ul>	n pow- ptimize al patient ith an based imize ecision in	0	
Large power reserves of 12	200 mA with	Cardiac, Spe	ctral and 4D imaging at

low-kV and Tin Filter for dose-optimized scanning even for bigger patients

Siemens Healthineers · Somatom go.Top



forming all other single source systems

#### Siemens Healthineers · Somatom Edge Plus Gantry bore 78 cm Scan speed Power 100 kW Up to 230 mm/s Highlights • Tin Filters – bringing CT doses to those expected in a routine X-ray series FAST Integrated Workflow with FAST 3D Camera drives precision in patient positioning • High Power 70 & 80 and 10 kV Steps helps to obtain high quality images despite large patient diversity Cardiac and 4D imaging at high quality and low dose • Pitch of up to 1.7 allows scanning of

 TwinBeam Dual Energy without dose 230 mm/s thus minimizing motion artifacts

penalty



- with unique Mobile Workflow, GO Technologies and FAST 3D Camera
- · Low-kV imaging, 10 kV Steps, Tin Filter, Stellar detector and iterative reconstruction enable dose-optimized scanning

High temporal resolution for excel-

- lent cardiac imaging Holistic spectral imaging solution with TwinSpiral and TwinBeam Dual Energy
- System footprint: 7.4 m<sup>2</sup>

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#### 20 to 64 Slices





#### 20 to 64 Slices



www.newtom.it

## New NEWTOM 7G WIDE.VISION

and and the

### **NEW IMAGING HORIZONS.**

Featuring a large gantry aperture, the NewTom 7G is the most advanced CBCT device on the market. From in-depth detail to the big picture. ULTRA-DETAILED MULTI-DIAGNOSTICS Localised analysis over the entire body. Ray2D and 3D imaging up to 90 µm, also with radiocontrast agent. Artifact reduction and movement analysis using CineX and Cine-Scout. The eXtra Functions protocol extends the field of view longitudinally to analyse anatomical structures such as the spine and limbs.

TECHNOLOGICAL EXCELLENCE High power generator (120 kV – 20kW). High-sensitivity 3D panel and innovative algorithms for volumetric reconstruction. 77 cm gantry aperture.

ERGONOMICS AND PRACTICALITY Fully motor-powered table and 10" touch-screens, front and rear. Optimised examination flow thanks to certified NNT software with processing, sharing and RIS/PACS connectivity functions.

MAXIMISING PATIENT CARE The patient lies comfortably on the table and X-ray doses are always proportioned to the patient's build and the examination type thanks to SafeBeam<sup>tm</sup> technology.



**Bet Up** The swivelling handle system for radiology

#### Safety for patients and health benefits for personnel

Febromed GmbH & Co. KG, the expert in delivery room equipment and medical accessories from Oelde, Germany, has developed 'get up', an innovative handle system for radiology. The new swivelling system was installed for the first time in a state-of-the-art CT scan room at the Institute of Diagnostic and Interventional Radiology and Neuroradiology at Essen University Hospital.

#### For a secure grip

Many patients find getting onto the examination table for a CT scan difficult. In particular, restricted mobility leads to uncertainty as the patient is positioned and arranged, thus placing increased physical strain on care personnel, predominately in the back area. The new 'get up' handle system from Febromed offers a solution: this swivelling system helps patients get onto the table before their scan and stand up again safely and comfortably afterwards. It minimises the risk of falling and provides a secure grip. It helps personnel by reducing the physical strain of their job. As a result, the organisation as a whole benefits: since the actual physical strain on personnel is significantly reduced, employee sick leave due to back pain is also minimised.

#### Positive experiences

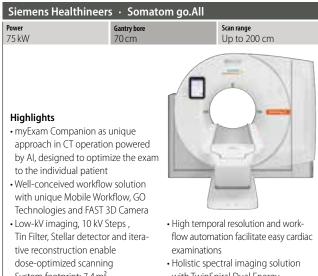
After installing the handle system in May 2017, the Institute of Diagnostic and Interventional Radiology and Neuroradiology at Essen University Hospital has consistently had positive experiences. As Anton S. Quinsten, Ltd. MTRA, reports, "We are really happy with the 'get up' system from Febromed. The first few months have shown that the handle system is considered a real asset by both patients and personnel."

#### Space-saving and durable

The 'get up' handle system is designed for space-saving mounting on the ceiling and can be swivelled by 360°. The structure can be locked in 15° increments so that the system is always in the optimal position for the patient. This purely mechanical construction ensures easy handling and extended durability.

www.febromed.com

#### 20 to 64 Slices



- System footprint: 7.4 m<sup>2</sup>
- - with TwinSpiral Dual Energy



- approach in CT operation powered by AI, designed to optimize the exam to the individual patient • Well-conceived workflow solution
- with unique Mobile Workflow and GO Technologies
- Tin Filter technology enables ultralow dose-optimized scanning at the levels of conventional X-ray
- The Stellar detector keeps electronic
- noise low and increases dose efficiency System footprint: 7.4 m<sup>2</sup>



- throughput Holistic spectral imaging solution
- with TwinSpiral Dual Energy



#### Siemens Healthineers · Somatom go.Up Scan range Power 32 kW Gantry bore Up to 200 cm 70 cm Highlights • myExam Companion as unique approach in CT operation powered by AI, designed to optimize the exam to the individual patient Well-conceived workflow solution with unique Mobile Workflow, GO Technologies and FAST 3D Camera Tin Filter technology enables ultralow dose-optimized scanning at the Holistic spectral imaging solution levels of conventional X-ray with TwinSpiral Dual Energy The Stellar detector keeps electronic · First level cardiac assessment supnoise low and increases dose ported by calcium scoring evaluation System footprint: 7.4 m<sup>2</sup> efficiency

#### 2 to 16 Slices

Fujifilm · FCT Speedia			
Power 48 kW	Gantry bore 75 cm		Scan range 110 cm
Highlights • 5 MHU tube • Sub second scan time for all applications • 0.675 mm minimum	The second	(	
thickness • Wide bore gantry for i		allow low d	terative reconstruction to ose examinations
<ul><li>experience and opera</li><li>Compact footprint to</li></ul>			with 24-inch color display btation: 16/32
easiness of installatio			tprint: 13.5 m <sup>2</sup>

M. 1.11. CT

• Iterative reconstruction and metal

artifact reduction (iMAR and SAFIRE)

Mobile CT			
Siemens Healthineers · Somatom On.site			
Power 35 kW	Gantry bore 35 cm		Slices 32
Highlights • Reduce in-hospital patie from the ICU to the radie department by bringing to the patient instead of way around • Consistent and reliable S image quality at the poi • Stellar detector with low for neuro imaging	blogy the scanner the other comatom nt-of-care	in-room pat • All-in-one c accessories,	d system design for tient scanning oncept with integrated e.g., shoulder board and r for neuro imaging

• Real mobility including integrated front camera for easy maneuvering

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#### Conebeam CT





#### Mammo CT





 3D Professional: 16 × 18 cm to investigate the entire dental-maxillofacial area and cervical spine.

#### Planmed Oy · Verity FOV Pixel size Scan time 13×16cm 18 s 127 µm Highlights Cone Beam CT (CBCT) scanner dedicated to extremity and head and neck imaging Weight-bearing imaging • kV range 80-96 • High quality 3D-imaging with Planmeca Ultra Low Dose Advanced artefact removal algorithms Compact, mobile, easy to site Motorized, soft-surface gantry adapts to the patient

#### **Oncology CT**

Canon · Aquilion LB		
Power 72 kW	Gantry bore 90 cm	Scan range 150/200 cm
Highlights • 70 cm FOV • 85 cm extended FOV • Artificial intelligence in scanning and processing • AIDR 3D iterative reconstr • <sup>PURE</sup> VISION low dose detect • 0.5 s rotation • 3.2 cm coverage • Up to 32 slices/rotation		<ul> <li>SURE Start iterative bolus tracking</li> <li>Respiratory gating</li> </ul>
• 300 kg patient table • SEMAR (Metal Artefact Re	eduction)	Iterative 3D Fluoro     Oncology table top

Canon · Aquilio	on Exceed LB	
<b>Power</b> 72 kW	Gantry bore 90 cm	Scan range 150/200 cm
	1	
Highlights	()	
• 70 cm FOV		

#### 70 cm FOV

- 90 cm extended FOV
- Advanced Intelligent Clear-IQ
- Engine (AiCE)
- Artificial intelligence in scanning and processing
- 0.4 s rotation
- 4 cm coverage
- 160 slices/rotation
- Dual Energy applications
- SURE Position patient centring



- CT Fluoroscopy
- Lateral table movement
- 300 kg patient table
- SEMAR (Metal Artefact Reduction)
- Respiratory gating Oncology table top

Siemens Healthineers · Somatom Edge Plus			
Power 100 kW	Gantry bore 78 cm		Scan speed Up to 230 mm/s
		1	-
		7 .	
Highlights		1	
<ul> <li>High speed scan, reconst post processing in RT rou</li> </ul>		1	9/
Slices per rotation: 128			
<ul> <li>Optimize image quality for patient by combining Direction</li> </ul>			-

 Improve target delineation with TwinBeam and Dual Spiral Dual Energy scans

 Flexible CT imaging with Edge Plus Sliding Gantry

STERNMED

STERNMED



and 10 kV Steps

with iMAR

Precise reduction of metal artifacts

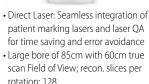
Comprehensive motion manage-

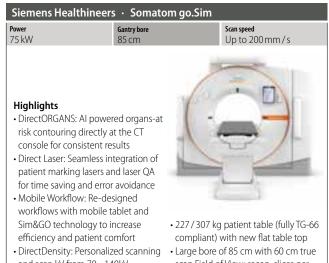
ment solutions for moving tumors

#### **Oncology CT**

Siemens Healthineers · Somatom go.Open Pro			
Power 75 kW	Gantry bore 85 cm		Scan speed Up to 200 mm/s
Highlights • Direct i4D: First 4D CT sca adapt to breathing patter time for dramatic motion reduction • 4 cm detector coverage rotation times for deep in breath-hold scanning	rns in real n artifact and 0.35 s	0.	

- DirectORGANS: AI powered organs-at risk contouring directly at the CT console for advanced contouring results
- TwinSpiral Dual Energy scanning and Tin Filter for less variability in target contouring





and scan kV from 70-140kV (in steps of 10)

## scan Field of View; recon. slices per rotation: 64



• The mobile workflow brings an

Power 32 kW

- mobility to daily CT routines Confident tumor visualization thanks to automated metal artifact reduction with iMAR
- Precise target contouring with optimum kV imaging and a single calibration curve thanks to DirectDensity
- A straightforward 4D workflow thanks to comprehensive respiratory motion management
- 227/307 kg patient table (fully AAPM TG-66 compliant) with new flat multi-index overlay

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#### **Mobile CT Solutions**



The Mobile Trailer is designed to bridge new equipment installations or temporary high workloads at hospitals or clinics. The trailer is equipped with an Aquilion Prime SP CT scanner which features the latest Advanced intelligent Clear-IQ Engine (AiCE) reconstruction. The design of the trailer, featuring expandable sides and patient lift for in-bed patients, allows high patient throughput without compromising on patient safety, workflow, or image quality. \* Upon request, other imaging modalities can be included in the Mobile Trailer



#### Highlights

Canon Medical · CT Scan Unit

With the CT Scan Unit, Canon Medical offers a deployable imaging solution that enables uncompromising workflow and imaging performance as well as personal safety anywhere and at any time. This unit can be transported by air, sea, road, and trail to any location. The latest model CT scanner of your choice including the latest Advanced intelligent Clear-IQ Engine (AiCE) reconstruction technology enables the best possible imaging results even under challenging conditions.

#### Accessories / Complementary Systems



- Uses a liquid metal bearing
- Supports 0.5 s full scans
- Our unique liquid metal bearing technology uses an all-metal target, enabling high anode heat dissipation with low noise and long bearing life.

Dunlee · CT Replacement Tube DA200P40+LMB



#### Highlights

The LMB DA200P40+LMB tube with Dunlee CoolGlide technology is specifically designed for use as a replacement tube on the GE Revolution Evo\* and Optima 660 CT\* scanners. Each tube is built according the highest quality and regulatory standards.

\*The products listed may be trademarks of the OEM. For the latest information regarding the compatibility of CT replacement tubes and scanners, please refer to our cross-reference guide at dunlee.com



#### Highlights

- Dunlee's CT replacement tubes:
- Meticulously engineered to be compatible with a variety of popular GE scanners
- Offer excellent quality
- Tube stocks at major airport hubs in the United States, Europe and Asia

#### Dunlee · Components Bundle for CT with CT8000



#### Highlights

- The Xpert bundle with CT8000 meets your needs for an ideal integration into high-end CT systems
- Consists of a CT8000 X-Ray tube with CoolGlide, generator, cooling unit and cables
- For a fast integration into your development process to speed up the time to market
- Pre-integrated and pre-calibrated components help to reduce R & D resources and cost
- Included certificates and approvals contribute to a fast time-to-market.
- Dunlee supports your team throughout development and the product lifecycle
- Extraordinary image quality combined with wide coverage



#### Highlights

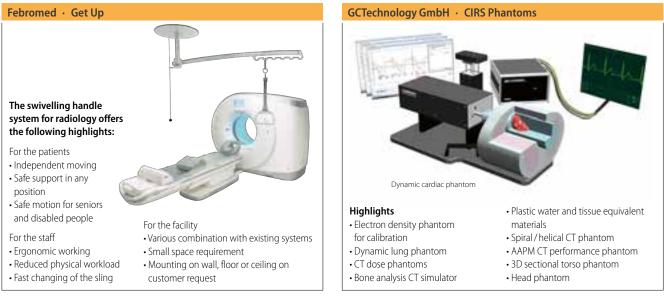
- The Xceed bundle with CT4000 delivers high reliability and long life for mid-range CT systems
- Consists of a CT4000 X-ray tube with CoolGlide, generator, cooling units and cables, and can also be ordered with a detector
- Supports outstanding workflow, with 90% fewer scan interruptions

through arcing and CoolGlide's exceptional cooling

- Pre-integrated and pre-calibrated components help to reduce R&D resources and cost
- Included certificates and approvals
- contribute to a fast time-to-market. • Dunlee supports your team through-
- out development and the product lifecycle



#### Accessories / Complementary Systems



#### I.A.E. · RTC 165







Highlights Colonic Insufflator for CT Colonography. The MedicCO,LON provides automated colonic distension with CO, gas for CT colonography

comfort.

of operation

procedures, providing reliable colon

distension while improving patient

State-of-the-art design allowing ease

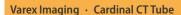


- Dosimetry option available
- Customizable

- Large, colour touchscreen LCD
- LED backlight and wide view angle
- Compact, lightweight design
- Multilingual interface
- Locking connectors

#### BEYOND SOLUTIONS

#### Accessories / Complementary Systems





#### Highlights

The Cardinal (Computed Tomography) CT tube is being designed into new OEM equipment and is also a direct replacement for the Stargate/CTR-2150 tube used in Philips Brilliance 6 and 16 CT scanners. The Cardinal has a high heat capacity with excellent image quality and throughput allowing for quicker imaging.

#### Varex Imaging · CT Replacement Tube – MCS 6074

#### Highlights

The MCS 6074 Computed Tomography (CT) tube is designed as a replacement tube for the GE Light-Speed and BrightSpeed families of CT scanners. The tube has a 200 mm (7.9") 140 kV, 4.7 MJ (6.3 MHU) maximum anode heat content, rotating anode insert. The insert features a 7° tungsten-rhenium facing on molybdenum with a graphite backed target. The MCS 6074 calibrates like the original, has long life bearings with 0.5 second full scans and offers a full 12-month warranty.



#### Varex Imaging CT Replacement Tube – MCS 8064



#### Highlights

The MCS 8064 is an anode end grounded (AEG) Computed Tomography (CT) tube designed as a replacement tube for Lightspeed VCT series scanners. The tube has a 240 mm (9.4") 140 kV, 5.7 MJ (8.0 MHU) maximum anode heat content, rotating anode insert. The insert features a 7° tungsten-rhenium facing on molybdenum with a graphite backed target. The MCS 8064 offers lower life cycle costs and boasts a full 12-month warranty. The MCS-8064 installs and calibrates on the LightSpeed VCT like the original OEM tube.



### DUNLEE'S LMB CT REPLACEMENT TUBE NOW AVAILABLE

### If you service GE CT scanners, Dunlee has good news for you:

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#### Real-time radiation plans, X-core MRI

# Significant advances in medical physics

To target ionised radiation as precisely as possible, imaging a tumour is vital in radiotherapy planning. "Today, imaging is used increasingly during the therapy itself," explained Professor Mark Ladd, Head of Medical Physics in the Department of Radiology at the German Cancer Research Centre (DKFZ) in Heidelberg, Germany, and President of the German Society for Medical Physics (DGMP), during the society's 51st annual meeting.



MR-Linac (Unity, Elekta AB, Sweden) at the University of Tübingen (DFG ZI 736/2-1): A hybrid system combining a 1.5-T MRI scanner with a 7-MV linear accelerator for online adaptive MR-guided radiotherapy Image source: Daniela Thorwarth / University Hospital Tübingen

#### Interview: Daniela Zimmermann

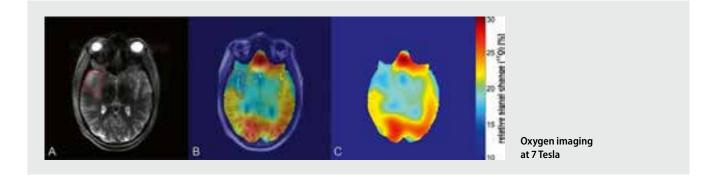
This new imaging role is possible due to the magnetic resonance linear accelerator, MR-Linac for short, which combines a linear accelerator with a MRI scanner. "It shows, in real-time, how the tumour moves with breathing," Ladd explained during our interview regarding current trends in medical physics.

Continuous MR-Linac scanning during radiotherapy enables tracking of breathing-induced movement and thus adjust the

therapy; it also records any change in location and size of the tumour during the weeks of therapy. "Rather sooner than later, we'd like to control the collimators in real-time so as to adjust radiation in view of the changes, compared to the initial therapy plan. In short: we want to tailor the therapy plan in real-time," Ladd underlined. The more precisely the tumour can be targeted, the higher the dose can be. "Thus the patients wouldn't have to undergo 30 radiation sessions but maybe only five," he pointed out. At DKFZ a project-team is looking for new approaches to adjust the collimators quickly.

Another research project in particle therapy deals with the exact recognition of the Bragg peak, i.e. the point when the energy of the ion beam reaches its peak and then sharply decreases. Since scien-

tists are still uncertain where exactly the Bragg peak ends in the body, a comparatively large safety margin is defined around the tumour to reach as much of the tumour tissues as possible. "With current technology the safety margin has to be so large that, in fact, we cannot realise the full potential of proton therapy," Ladd reported. Thus, researchers are trying to develop different methods to determine the Bragg peak in vivo. One of these approaches tries to detect secondary gamma rays triggered by the proton beam in the body.



#### Better insights: photon-counting CT

Photon-counting CT is another remarkable development in radiology. DKFZ houses one of three CT prototypes worldwide that feature a unique component: a photon-counting detector made of a semi-conductor material that can directly convert X-rays into electrical signal impulses, making it particularly efficient. "I do hope that this technology will one day be clinical routine," Ladd said.

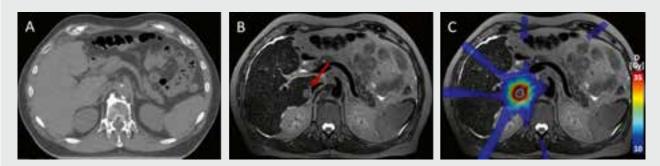
While photon-counting detectors are expensive, they offer better resolution and allow imaging with significantly lower contrast doses. "With regard to the current debate about contrast media, photon counting is a very promising approach," he said.

#### MRI with new elements and high field strength

Another trend in medical physics is X-core MRI. While in conventional MRI the spin of the hydrogen nucleus is measured, X-core MRI determines the magnetic moment of isotopes of other nuclei, e.g. sodium-23 (Na-23), oxygen-17 (O-17), potassium-39 (K-39) or chlorine-35 (Cl-35). Problem: these isotopes are rather rare. Only 0.04 percent of oxygen, for example, is O-17. In a DKFZ research project, patients inhale a gas enriched with O-17 during the MRI scan. The oxygen travels through the blood and as soon as it reaches the mitochondria in the cells and is converted into water it can be visualised. "This enables us to precisely measure the local oxygen metabolism in the brain and in other parts of the body," Ladd explained. Currently, one team is trying to detect whether regional differences in metabolism might indicate which areas of the brain will recover after a stroke and which ones won't.

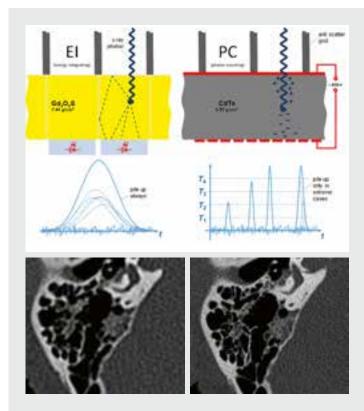
Visualising the distribution of O-17 and other isotopes in MRI requires a field strength of 7-Tesla. Indeed, beyond this application 7-T MRI is one of the key development areas in medical physics. Since 2017, the first systems have been certified for clinical exams, initially limited to head scans and smaller joints. The advantage of a 7-T MRI scanner is not only resolution. "There is an interdependence of sensitivity and time." Ladd said, adding "with a field strength of 1.5-T we can examine about everything that we can examine with 7-T – but at a much slower speed."

3-T scanners are mostly used to perform exams faster than with a 1.5-T scanner. By contrast, a 7-T scanner not only reduces exam time but also offers enhanced spatial resolution and more detail. "You can compare it with standard and HD resolution of a TV screen: suddenly you see things you could not see before," Ladd said. For example, the so-called swallow tails in the basal ganglia, hose lack indicates Parkinson's disease, can only be vaguely seen in a 3-T scan – but they are clearly visible in a 7-T scan.



MR-guided high precision radiotherapy of a liver metastasis. (A) Native planning CT; target delineation is not possible without implanted markers or contrast agent injection. (B) Excellent visualisation of the target region using navigated T2-weighted MRI (red arrow).

(C) Markerless MR-guided stereotactic body radiotherapy of a liver metastasis using the 1.5 T MR-Linac (Unity, Elekta AB, Sweden) 09/2020 at the University Hospital for Radiation Oncology Tübingen. Image source: Daniela Thorwarth / University Hospital Tübingen



Photon-counting detectors are a major innovation in clinical CT. These directly converting detectors register photons and record their energy. Moreover, their pixels are much smaller than those of conventional detectors. The new technology promises spectral resolution comparable to dual energy CT, significantly smaller doses and greatly enhanced spatial resolution. The images of an inner ear were acquired with an experimental photon-counting whole-body CT scanner (Somatom CounT, Siemens Healthineers) at DKFZ Image source: DKFZ/University Hospital Heidelberg

#### Gradient coils: pushing the envelope of physics

Ladd sees larger gradient fields as an overall trend in MRI. The faster the gradient, the higher the risk of peripheral nerve stimulation. This fact has limited the use of larger gradient fields. GE Healthcare, however, has developed a 3-T system for the head only, which is equipped with a faster gradient since, in head-only exams, the problem of nerve stimulation is less pronounced.

Some research teams have managed to simulate nerve stimulation caused by gradient coils prior to the actual scan. Before, the degree of nerve stimulation was measured using fully developed gradient coils and a performance cap for this particular coil was determined. Today, computer programs can predict the degree of peripheral nerve stimulation, thus the coils can be optimised in the development phase. "Over the next few years, we will see significantly stronger gradient systems," Ladd predicts.

#### PET-CT and the 2 metre detector

Last, but not the least in PET-CT, the first whole-body scanner may be in the wings. The Chinese company United Imaging developed a detector that measures two metres! Siemens is working on a system that combines four conventional detectors and thus enables a PET-CT scan of more than a metre. "Whole-body PET-CT could open up new possibilities in imaging, which were unrealistic before due to the exceedingly high radiation exposure," Ladd explained, "including new options for visualising the course of a therapy."

www.dkfz.de



Having joined the German Cancer Research Centre (DKFZ) in Heidelberg in 2013, today **Professor Mark Ladd** heads Medical Physics in its Department of Radiology. He

is also President of the German Society for Medical Physics (DGMP). His research focus is magnetic resonance imaging (MRI), particularly the launch and further development of new methods using ultra-high-field strengths and MRI in image-guided radiotherapy. He studied electrical engineering at the University of Michigan in Ann Arbor and Stanford University in California. In 1998, and received his doctorate from ETH Zurich in the context of a research cooperation project between the University Hospital Zurich and GE. In 2004 he became Professor of Biomedical Imaging at Essen University Hospital, where he increasingly focused on ultrahigh-field MRI.

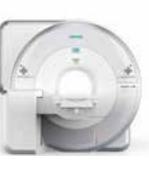
## Magnetic Resonance Imaging



#### PET MRI

Siemens Healthineers · Biograph mMR		
Gradient 45 mT / m <sup>1</sup>	Slewrate 200 T / m / s <sup>1</sup>	<b>Channels</b> Up to 102 × 32
<sup>1</sup> Maximum gradient amplitude and slewrate ca	n be applied simultaneously	
Highlights • Largest customer base o PET-MR systems worldw • State-of-the-art 3T MRI v 2nd order shim • Comprehensive set of su available for full range of exams • Not only simultaneous, b	ide vith rface coils MR-only • Whole-bo	dy MR-based PET attenua- tion including major bones

gistic PET-MR: MR-based motion compensation of PET images



- Up to 10 bed positions with PET-MR Available with syngo MR E11 software

#### 3 Tesla



- silent scanning with Pianissimo Zen Fully integrated Deep Learning
- Reconstruction: Advanced intelligent Next generation scan techniques Clear-IQ Engine (AiCE). AiCE produces exceptionally detailed MR images with high SNR
- for automated scan-planning and increased productivity
  - · Enhanced throughput with Compressed SPEEDER, dockable table and live planning tool ForeSee View

Siemens Healthineers	Magneto	tom Vida with BioMatrix	
Gradient Up to 60 mT/m <sup>1</sup>	Slewrate 200 T / m / s <sup>1</sup>	<b>Channels</b> Up to 228 × 128	
<sup>1</sup> Maximum gradient amplitude and slewrate can	be applied simultaneously	ly	
Highlights • The first MRI scanner with technology • An all-new, 3T magnet w Field-of-View of 55 × 55 > • Up to 60 / 200 XT gradier to 25 percent higher SNR • Up to 50 percent faster ro with Turbo Suite* • Perform free-breathing liv and cardiac MRI with Con Sensing GASP-VIBE and Sensing Cardiac Cine	ith a large < 50 cm <sup>3</sup> its – for up for DWI butine exams rer dynamics npressed Compressed	<ul> <li>Reliable and predictable whole-b MRI exams – in just 25 minutes</li> <li>Explore new diagnostic frontiers based quantitative information w MR Fingerprinting</li> <li>Latest applications available with</li> </ul>	vith
<ul> <li>Field-of-View of 55 × 55 &gt;</li> <li>Up to 60 / 200 XT gradier to 25 percent higher SNR</li> <li>Up to 50 percent faster rowith Turbo Suite*</li> <li>Perform free-breathing livand cardiac MRI with Con</li> </ul>	< 50 cm <sup>3</sup> hts – for up for DWI butine exams rer dynamics hpressed Compressed	MRI exams – in just 25 min • Explore new diagnostic fro based quantitative informa	ntiers ntiers ation v

 Latest applications available with syngo MR XA31A

#### 7 Tesla

Siemens Healthineers · Magnetom Terra			
Gradient 80 mT/m <sup>1</sup>	Slewrate 200 T / m / s <sup>1</sup>		Channels Up to $64 \times 64$
<sup>1</sup> Maximum gradient amplitude and slewrate car	be applied simultaneous	ý	
Highlights • World's first 7T MRI scann for clinical use • Dual Mode – secure swit research and clinical ope • 50 percent lighter 7T may nology** for easier integr	ch between ration* gnet tech-	Submillimet	ter BOLD fMRI precision
<ul> <li>clinical environments</li> <li>Double SNR for more pre</li> <li>XR 80/200 gradients; up ti parallel transmit in research</li> </ul>	cision*** o 16 channel	for pre-surg • Available wi • Additional m	ical evaluation th syngo MR E12 software netabolic information with g and <sup>31</sup> P spectroscopy

\* Research mode as part of dual mode is available as an option and not intended for clinical use \*\* Compared to previous 7T generation \*\*\* Compared to 3T systems

Gradient 80 mT/m <sup>1</sup>	Slewrate 200 T / m / s <sup>1</sup>	<b>Channels</b> Up to 204 × 128
Highlights • A unique MR de tion in research a • Unique scannne package: benchi homogeneity; h	nd slewrate can be applied simultaneous sign driving innova- applications r technology in one mark 3T magnet ighest gradient	
80/200 gradien transmit technol imaging and ult	performance with XR ts; advanced parallel logy for zoomed ra-high coil element 4G designed for	<ul> <li>Driving the largest and most active MRI research network</li> <li>Latest applications available with</li> </ul>

Siemens Healthineers • Magnetom Lumina with BioMatrix				
Gradient	Slewrate	Channels		
36 mT/m <sup>1</sup>	200 T/m/s <sup>1</sup>	180×32		
<sup>1</sup> Maximum gradient amplitude and slewrate ca	n be applied simultaneously			
<ul> <li>Highlights</li> <li>New 3T magnet with 70 bore and large 55 × 55 ×</li> <li>Unique BioMatrix techno automatically adjusts to biovariability</li> <li>With Deep Resolve, our rered advanced image retechnology**</li> </ul>	cm open 50 cm <sup>3</sup> FoV ology patient new Al-pow- construction - GO technol	ogies powered by elligence boost patient		
New Turbo Suite acceleration	ation throughput	t		
packages enable up to 5	5 1	ications available with		

 Latest applications available with syngo MR XA31A

\*Data on file Deep Resolve is pending 510(k) clearance, and is not yet commercially available in the United States.
 Its future availability cannot be guaranteed

clinical routine examinations

RADBook 2021

- h

\*Data on file

## HUBOOK 2021

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### healthcare-in-europe.com

### Canon · Vantage Elan NX Edition Gradient 33 mT/m Slewrate 125 mT/m/s Channels 64 Highlights • Patient friendly 63 cm open bore with

- $55 \times 55 \times 50$  cm spherical scan area
- Fully integrated Deep Learning Reconstruction: Advanced intelligent Clear-IQ Engine (AiCE). AiCE produces exceptionally detailed MR images with high SNR
- EasyTech solutions for automated scan-planning and increased productivity



Compressed SPEEDER, Fast3D and live planning tool ForeSee View Low total power requirement of 25 kVA

Hitachi · Echelon Smart				
Gradient 33 mT/m	Slewrate 130T/m/s	Channels 16		
Highlights • "SmartQuality" for superb images and sophisticated • "SmartSpeed" for reduced nation time • "SmartComfort / SoftSou for an extraordinary quie experience	l applications d exami- nd Suite" t patient •"Sma	rtSpace" to offer the smallest ible installation footprint		
	poss			

- "SmartECO" for low running costs
- Field strength: 1.5 T

#### 1.5 Tesla



- with high SNR live planning tool ForeSee View
- Hitachi · Echelon Smart Plus Slewrate 130 T / m / s Gradient Channels 33 mT/m 16 Highlights · IP-Rapid, the latest Iterative processing technology, reduces time of SynergyDrive optimizes the workflow with Hitachi's automation and
- routine scans by up to 50 percent
- acceleration technology
- (AutoPose, AutoExam, AutoClip)

 SoftSound Suite to reach 96 percent sound pressure reduction at maximum

Siemens Healthineers	5 · Magnet	om Sola Ca	rdiovascular	Edition
Gradient 45 mT / m <sup>1</sup>	Slewrate 200 T / m / s <sup>1</sup>		Channels $204 \times 64$	
<sup>1</sup> Maximum gradient amplitude and slewrate car	n be applied simultaneous	ly		
Highlights • A dedicated MRI scanner to meet the demands of cular examinations • Free-breathing CMR exar Compressed Sensing Car for functional imaging ev patients with arrhythmia who cannot hold their bu • Tissue characterization w Maps and HeartFreeze for diagnosis of myocardial i • Consistent results, fast w	cardiovas- ms with diac Cine /en for s or those reath rith Myo- r differential njury	and step-by exams in as	for fast patient : -step guidance little as 30 min cations available A31A	for CMR utes*
Sensors and the Al-powe		* Data on file, result		



#### How to deliver more and better care at lower costs

## Moving the needle in MRI productivity

In an industry where every second and every click counts, workflow inefficiencies consume as much as a third of the MRI procedure time.<sup>1</sup> This is a key area of focus where technology advances can radically change what is possible with an MRI exam. Given declining reimbursements, fewer skilled resources, and the systemwide burden of chronic diseases, maximizing productivity is a strategic goal for a healthcare organization to reach its optimal performance. The best way to achieve this goal is the holistic optimization of the entire imaging value chain: From patient preparation to image acquisition and postprocessing – while maintaining a high standard of image quality as well as patient comfort.

## Less than one minute for a more reproducible and automated patient preparation<sup>2</sup>

Patient preparation for MRI is a complex task: Technologists need to manage software and hardware. It is during the patient-facing part of the process where a positive patient experience is crucial: One study found that 42 percent of surveyed adults stated they were afraid of undergoing an MRI.<sup>3</sup> The more comfortable the patient and the better their experience during patient set-up the easier it is to get the scan right the first time.

Innovations such as BioMatrix technology improve consistency, enhance patient comfort to avoid motion and accommodate challenging physiology and anatomy. Integrated Respiratory Sensors, for example, detect breathing patterns from the moment the patient lies on the table to help the system anticipate motion and secure a high-quality image, all while reducing patient set-up time.

BioMatrix Select&GO leverages artificial intelligence to help the technologists position patients faster and avoid repositioning delays – no matter how tall, big, or mobile a patient is. The BioMatrix Dockable Tables with eDrive allow the technologist to move a patient quickly and easily to and from the scanner; one patient can be set up while another is in the scanner, thus improving workflow.



Productivity **Z** Patients / time period



"As a result of protocol optimization and better patient handling, we were able to increase patient examination to 40 patients per day. [Also, this week] our technicians were able to perform seven knee examinations in one hour and 20 minutes – this is a slot time of eleven minutes per patient."

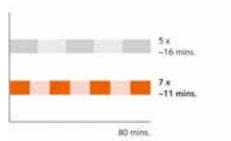
**PD Dr. Gerwin Schmidt,** DIE RADIOLOGIE, Munich, Germany<sup>8</sup>

#### Up to 50 percent time savings in image acquisition<sup>4</sup>

Image acquisition is a critical phase in multiple aspects of the diagnostic workflow, including tailoring the MRI exam to specific patients, improving the patient experience, and image quality. Exam consistency across multiple scans and follow-ups for the same patient supports a more accurate read.

myExam Companion guides the acquisition or even automates it to large degrees. This improves productivity, standardization, and consistency across patients and in follow-up exams, independent of the skill level of the technologist. This results in 45 percent<sup>5</sup> lower tasks at hand for the MRI technologists versus using a non-myExam Companion Workflow. Acceleration technologies such as Simultaneous Multi-Slice (SMS) and Compressed Sensing (CS) make the acquisition faster than ever. When patients cannot hold their breath, acceleration technologies can expand access to specific MRI applications for some of the sickest patients.

New advances, such as Deep Resolve<sup>6</sup>, are planned to provide an advanced reconstruction technology using deep learning and Artificial Intelligence. Its components Deep Resolve Gain and Sharp are designed to make scans faster and boost workflow efficiency while improving patient comfort.



Reducing MSK slot times by 5 mins. with MAGNETOM Sola<sup>9</sup>

#### Faster post processing due to AI-powered features

While the number of MRI exams is continually on the rise, the workload of each radiologist is increasing dramatically. On average, a radiologist interprets one image every 3–4 seconds, 8 hours a day.<sup>7</sup> Software innovations, including Artificial Intelligence, allow for faster post processing and eliminate errors and inconsistencies.

Al-Rad Companion is an Al-powered radiology assistant that supports by performing automatic measurements and preparing the results in the form of valuable clinical images and quantifications for MR Brain and Prostate.

#### Improvements in clinical practice

DIE RADIOLOGIE, a large multi-site radiology practice in Munich, Germany, is already using the Siemens Healthineers MRI productivity solutions, performing a broad range of MRI examinations. MAGNETOM Sola has enabled DIE RADIOLOGIE to reduce the average slot time to 20 minutes, resulting in a throughput of 30 patients in a 10-hour shift. Thanks to this accelerated workflow, DIE RADIOLOGIE has increased patient throughput by 17 percent while maintaining excellent image quality.

www.siemens-healthineers.com/mri-productivity

<sup>1</sup>Beker K, et al. AJR Am. J. Roentgenol. 2017; 209: 836-844 <sup>2</sup>Data on file

<sup>3</sup>Siemens Healthineers survey conducted in May 2015 in which 2,000 UK adults were asked about their attitudes on their health, hospitals, and medical appointments <sup>4</sup>Data on file <sup>5</sup>Case Study by Prof. Forsting, Prof. Antoch, Department of Diagnostic and Interventional Radiology and Neuroradiology, University Hospital, Essen, Germany
<sup>6</sup>Deep Resolve is still under development and not commercially available yet. Its future availability cannot be ensured

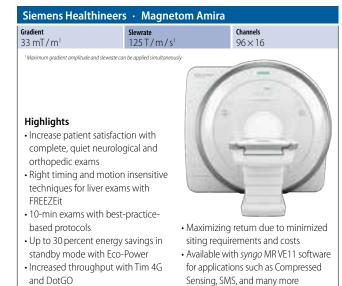
<sup>7</sup>McDonald R, et al. The effects of changes in utilization and technological advancements of cross-sectional imaging on radiologist workload. Acad. Radiol. 22(9): 1191-1198 <sup>8</sup>The statements by Siemens Healthineers' customers described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical"hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption), there can be no guarantee that other customers will achieve the same results. This statement is from a person whose institution is engaged in a collaboration with Siemens Healthineers "Data on file



Deep Resolve is planned to reduce acquisition time and recovers resolution Study ID: 2aaaa1917

#### 1.5 Tesla

Siemens Healthineers	Siemens Healthineers $\cdot$ Magnetom Sola with BioMatrix				
Gradient Up to 45 mT/m <sup>1</sup>	Slewrate Up to 200 T/m/s <sup>1</sup>	<b>Channels</b> Up to 204 × 64			
<ul> <li>Maximum gradient amplitude and slewrate ca</li> <li>Highlights</li> <li>70 cm open bore with 50 × 50 × 50 cm<sup>3</sup> Fo</li> <li>Unique BioMatrix techno tically adjusts to patient b</li> <li>Ten unique Dot Engines highly automated scan p</li> <li>Free-breathing examinat Turbo Suite Elite</li> <li>Simultaneous Multi-Slice Compressed Sensing for 3D imaging</li> </ul>	V logy automa- piovariability provide tions with e and 2D and b v c Latest ap syngo Mi	plications available with R XA31A			
* Deep Resolve is pending 510(k) clearant Its future availability cannot be guarant		e in the United States.			



Gradient 33 mT/m1	Slewrate 125 T/m/s <sup>1</sup>	<b>Channels</b> 180×32	Gradient 33 mT/m <sup>1</sup>	Slewrate 125 T/m/s <sup>1</sup>	<b>Channels</b> Up to $96 \times 24$
у , ,	nd slewrate can be applied simultaneously	7-	<sup>1</sup> Maximum gradient amplitude	and slewrate can be applied simultaneou	sty
<ul> <li>ically adjusts to p</li> <li>50 percent* faste examinations wi</li> <li>GO technologies boost patient th</li> <li>Innovision** – th patient infotainn</li> <li>* Data on file</li> <li>** Innovision is still under</li> </ul>	D cm <sup>3</sup> FoV technology automat- atient biovariability er clinical routine th Turbo Suite a powered by AI to roughput ne revolutionary nent solution	• With Deep Resolve our new Al-p ered advanced image reconstruct technology*** • Latest applications available with syngo MR XA31A cially available. Its/uture availability cannot be guara mmercially available in the United States.	biovariability Boost productiv Simultaneous M applications Increased patien MRI exams with GO technologie	djusts to patient vity with Turbo Suite, Multi-Slice, and GO nt access to advanced free-breathing exams	<ul> <li>Save energy consumption with Eco-Power</li> <li>Increased consistency and workfl acceleration with DotGO and GO technologies</li> <li>Available with syngo MR XA 12 so</li> </ul>

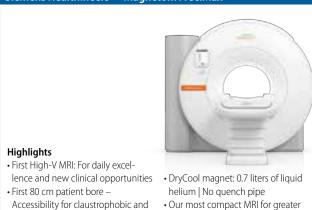
#### Siemens Healthineers · Magnetom Sempra Gradient Channels Slewrate 100 T/m/s<sup>1</sup> 30 mT/m<sup>1</sup> Up to 96 × 16 <sup>1</sup> Maximum gradient amplitude and slewrate can be applied simultaneously Highlights • 10-min exams with best-practicebased protocols • Up to 30 percent energy savings in standby mode with Eco-Power Increased throughput and consistency with Brain, Spine and Large Joint Dot engines More patient comfort with ultra-lightweight Tim 4G coils and Quiet Suite Compressed Sensing, SMS, and many Expand clinical offerings with ad-

- vanced trendsetting applications Latest applications available with syngo MR XA12 software such as
- more
- Increased consistency and workflow acceleration with DotGO and GO technologies



#### High-V MRI (0.55 Tesla)

#### Siemens Healthineers · Magnetom Free.Max\*



- Accessibility for claustrophobic and obese patients
- New blanket-like contour coils for
- comfort and flexibility sional with myExam Autopilot

siting flexibility

Intuitive operation for any profes-

\* The product is still under development and not commercially available yet. Its future availability cannot be ensured

## H I DBOOK 2021

#### Please visit us at healthcare-in-europe.com

Slewrate 55 T/m/s

#### Hitachi · Airis Vento Plus

Gradient 22 mT/m

#### Highlights

- Comfort class permanent open MRI system, which keeps enhanced capabilities meeting
- sophisticated open design Offers newly developed
- technologies available at an excellent cost of ownership New generation open MRI with
- SynergyDrive contains IP-RAPID iterative reconstruction technology, AutoExam with automatic slice positioning and all around RADAR motion artifact reduction



- Environment friendly: extremely low power consumption and reduced installation requirements
- Low running costs allowing fast
- return of investment
- Field strength: 0.3 T

#### Oncology

#### Siemens Healthineers · Magnetom RT Pro Edition

#### Highlights

- Support precision in RT with Magnetom Sola, or Vida and trendsetting applications such as RESOLVE, StarVIBE or Compressed Sensing GRASP-VIBE
- Scan patients consistently in the treatment position with dedicated RT positioning equipment (CIVCO, Orfit, Qfix), and MR compatible laser
- bridge (LAP) · Rely on intuitive and dedicated RT workflows with RT Dot Engine and RT Image Suite



- Enable an MR-only RT planning workflow with RT Dot Engine and Suite's Synthetic CT feature
- Caption organ motion in abdomen and thorax under free-breathing with automatic respiratory phase sorting with 4D MRI-RT Respiratory Self-Gating

#### Open

#### Hitachi · Aperto Lucent Plus Gradient Slewrate 55 T/m/s Channels 25 mT/m Highlights • Wide, 320 degrees open permanent MRI system · Features premium field strength amongst the permanent MRI systems presently on the market New generation open MRI with SynergyDrive contains IP-RAPID Fast processing chain allows iterative reconstruction technology, increasing patient throughput AutoExam with automatic slice · Reduced running costs allowing fast positioning and all around RADAR return of investment motion artifact reduction. • Field strength: 0.4 T



#### Open

SternMed · Marcom	0.35T	
Gradient max. 25 mT/m	<mark>Slewrate</mark> 75⊤/m/s	Channels 4
Highlights - Fully open magnet - Nd-Fe-B magnet - 4D shimming - Eddy Zero technology - Self-regulating constant - Fully digital 4 channel re spectrometer - Automatic coil tuning - Accurate position assist - Use of advanced active s algorithm for real-time a shimming on each exam - Higher SNR - Higher resolution	ceiving shimming • uutomatic • nination •	Less scanning time Comprehensive scanning sequences Advanced imaging techniques Five standard coils and more than seven optional coils

#### **MRI** Coils



- · High-signal-to-noise ratios to support advanced imaging applications
- Wide range of MR biopsy disposables (grids, needle blocks/sleeves, markers, holders, phantom, etc.)



#### Noras · Encompass 15-Channel Headcoil System platform **Field strength** Channels 3 T Siemens Highlights Dedicated head coil for high-resolution, used in combination with a radiotherapy mask • MRI control before and after stereo-• Transversal, sagittal, coronal and

- tactic radiotherapy
- High-resolution MR diagnostics of
- head and neck
- tilted images possible Removable double mirror for claustrophobic patients

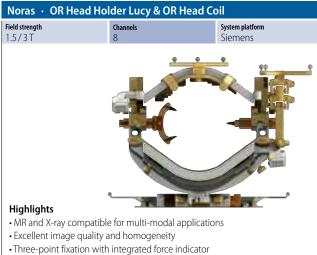
Noras · Mandibula 1	5-Channel Dental Coil	
Field strength 3 ⊤	<b>Channels</b> 15	System platform Siemens
Highlights	ed MR imaging in dental are	
Easy to position and adju	ustable for each patient	
<ul> <li>Excellent patient comfor</li> </ul>	rtability	

- Excellent patient comfortability
- Reduced scan times with higher image quality
- Optional mirror attachable for claustrophobic patients

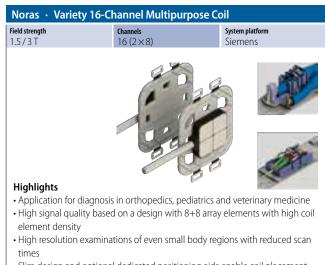


- Transperineal access to the prostate
- MR-guided biopsy and therapy
- Focal biopsy and therapy instead of "blind" biopsy
- \*Compatible with standard MR coil portfolio

#### **MRI** Coils



- Removable and height adjustable lower coil
- Excellent access to the field of intervention



 Slim design and optional dedicated positioning aids enable coil placement close to anatomy of interest

## IT IS READY QUICKER, THAN YOU CAN SAY **DIAGNOSIS?**

The Accutron CT-D is the mobile diagnostic specialist that ensures a continuous and precise flow of contrast agent. It is ready to use quickly and is portable, patient-friendly, can be operated intuitively and is extremely economical.



Hauptstraße 255 · 66128 Saarbruecken www.medtron.com

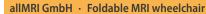
#### Accessories / Complementary Systems



- Enabling fetal cardiac MRI, smart-sync enables a secondary imaging modality for prenatal diagnosis
- Improving adult cardiac MRI, smart-sync is easy to apply and independent of field strength



- Glass fiber handle 145 cm long with mop press wringer, optional with
   complete cleaning cort available
- complete cleaning cart available







Solid rubber tires

GCTechnology · CIRS Phantoms



For the patients

Independent moving

Febromed · Get Up

- Safe support in any position
  Safe motion for seniors and disabled people
- For the staff
- Ergonomic working
- Reduced physical workload
- Fast changing of the sling



For the facility

- · Various combination with existing systems
- Small space requirement
- Mounting on wall, floor or ceiling on
- customer request



abdominal, breast, prostate and lumbar phantom

#### MR head distortion Phantom for SRS

34

## Injectors



#### Injectors

Bracco · CT Exprès			Bracco · Emj	powerCTA+
Application CT	Pressure 9.1 bar	FlowRate 0.5 – 9.9 ml /s *	Application CT	$\frac{\text{Pressure}}{40 - 32}$
Highlights • Syringeless injector • Direct injection from con • Air and occlusion detecti • Unidirectional flow of flu • Locking and automatic fi • Digital interface, dual tou • DiluJect (optional): contr are injected in rapidly alt the injector • Day Set III <i>HP</i> designed fo • Pre-warmed contrast meet * in steps of of 0.1 ml/s	ion on fluid channels id Iling uch screens ast media and saline ernating flow through or 24 hours		<ul> <li>Tilt sensor / loci</li> <li>Arming at the i</li> <li>Independently compact inject</li> <li>Integrated eleci</li> <li>Modular flexibi</li> <li>Windows baseserviceability a</li> <li>Touch-screen contruitive software</li> <li>Multi-patient to Must kit PLUS 0</li> </ul>	injector r rotating and very tor head (270 deg ctroluminescent d ility of componen d software allow o ind enhanced exp color LCD display a are ubing kit for CT:

lication Pressure 40 – 31	25 psi	FlowRate 0.1 – 10.0 ml/s *
ighlights iyringe: 200 ml (CM), 200 ml (Na ilt sensor / lockout Arming at the injector ndependently rotating and very compact injector head (270 deg ntegrated electroluminescent of Modular flexibility of componen Vindows based software allow erviceability and enhanced exp ouch-screen color LCD display ntuitive software Aulti-patient tubing kit for CT: Aust kit PLUS CT	aCl) / rees) isplay ts and optimal andability and	

#### Bracco · EmpowerMR Application MR Pressure 40-300 psi FlowRate 0.1 – 10.0 ml/s \* Highlights Syringe: 100 ml (CM), 100 ml (NaCl) Hydraulic injector system MRI compatible through the use of polymers and non-ferromagnetic metals • Little contrast media waste due to the very short distance between injector head and patient Very lightweight injector head • No active components in the shielded room (no battery) Unique multi-patient tubing kit for MR: Must kit PLUS MR

\* 0.1-10.0ml/s in user-specified increments of 0.1 ml/s

Guerbet · Illumena	Néo	
Application CT/Angio/Cardio	Pressure 5.2-82.7 bar <sup>1</sup> /5.2-21 bar <sup>2</sup>	FlowRate $0.1 - 40 \text{ ml/s}^1/0.1 - 10 \text{ ml/s}^2$
Highlights Multi-mode contrast deliv High visibility screen One finger operation fill I Single or multi-injection Switch between operatir Hand switch and foot swite Air Detection Aid & Warn (ADAWS) identifies blood syringes and air bolus Configurations: Pedestal, ceiling or table Heater: 37° ± 3° Connectivity with Contra	bar procedures ng modes ches available ning System d, empty mount ast&Care (optional)	Page and 6/T made
Components and consumables certifie	ed by the manufacturer	<sup>1</sup> Angio mode/ <sup>2</sup> CT mode

Guerbet · OptiVar	itage Single Üse		
Application CT	Pressure 22.4 bar	FlowRate 0.1–10 ml/s	
Scanner interface to CA     OptiBolus bolus shapi     the window of imagir     Configurations:     Pedestal and ceiling n     Loading, filling & prim	ay, auto-fill, auto purge elay, patency check ouchscreen powerhead N Open Class 4* ng software extends ng opportunity nount options ing: Automatic / manual n: 10% – 90% (5% steps) ntrast&Care (optional)	* dependent on scanner manufactu	

Guerbet · FlowSens			
Application CT	Pressure 21 bar		FlowRate 0.3 - 10 ml/s
Highlights Syringeless CT contrast del Advanced touchscreen i Only few seconds betwe 12H manyFlow (closed pre-connected c Secufill patient line (scientific study on dema All available media conta Check-valves (no backflo 4 Air sensors Temperature maintenan Pressure monitoring: graphical and numerical Components and consumables certifi	nterface een patients lay set) and) ainers ww) ce	(optional)	ng & .omatic ns:

36

#### Injectors

Guerbet · OptiStar	Elite	
Application MR	Pressure 10.3 / 13.8 bar*	FlowRate 0.1 – 10 ml/s / 0.1 – 8 ml/s*
, 5	<ul> <li>Patency check</li> <li>Timing bolus</li> <li>Drip mode</li> <li>Colour touchscreen</li> <li>Automatic pressure control</li> <li>Connectivity with Contrast&amp;Care (optional)</li> </ul>	* dependent on type of syringe
	,	, ,, ,, ,,



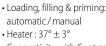
#### Highlights

- Single head CT contrast delivery system
- Compatible with prefilled syringes & vials
- · Scan delay, phase delay, auto-fill, auto purge
- Timing bolus, inject delay
- Fully programmable touchscreen
- powerhead

Pedestal and ceiling mount

- Scanner relay interface as standard
- OptiBolus bolus shaping software extends the window of imaging opportunity





 Connectivity with Contrast&Care (optional)

Components and consumables certified by the manufacturer

Guerbet · OptiVantage Multi-Use		
Application	Pressure 22.4 bar	FlowRate 0.1–10 ml/s
Highlights Dual head CT contrast de When efficiency and care • Newly designed multi-u • All in one preconnected with closed system, air & • Secufill patient line with valve • Only a few seconds prep between patients • Certified syringes & mar • Countdown timer to ale compliancy with hygier • Safe with patency check timing bolus and simult Injection features	combine seamle use interface d dayset, & particles filters n double safety paration nyFill dayset ert you of ne regulations k, tilt enable,	

(optional) Components and consumables certified by the manufacturer

\* dependent on type of scanner manufacturer

	ldex of Advertisers
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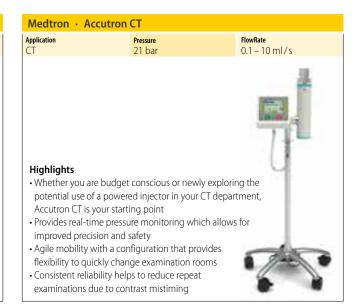
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#### Injectors

Medtron · Accutron	CT-D Vision	
Application CT	Pressure 21 bar	FlowRate 0.1 - 10 ml / s
<ul> <li>Highlights</li> <li>New design for more corability and less eye fatigus system and new casters</li> <li>Enriched user experience better patient care</li> <li>Integrated with RIS and I the scanner interface to and improve patient turr</li> <li>Limits patient risk by red a patient receives during</li> <li>Supports the development</li> </ul>	mfort with improved read- ue, new battery management e with a simpler workflow an PACS (as an option) as well a reduce workload for the open haround times ucing the amount of contra injection ent of contrast-enhanced linical service in mammo-	nt nd as with erator



Medtron · Acc	utron MR3	
Application MR	Pressure 21 bar	FlowRate 0.1 – 10 ml/s <sup>1</sup> /000.1 – 30 ml/s <sup>2</sup>
administration o • Works with selec	fusion pump enables simul f fluids during an MRI exam t pre-filled syringes to incre	ination pase
turnaround time • Integrated infusi administration o	uick use and improved pati s on pump enables simultane f additional medication nee undergo MRI examination	eous

Medtron · Acc	cutron MR	
Application MR	Pressure 21 bar	FlowRate 0.1 – 10 ml
vascular access o • Compatibility wi	(KVO) software feature hel luring longer imaging prod th selected pre-filled syring and select the most suitab n patient	cedures ges makes it

 Can be used with two touch screen remote controls so that one injector is shared between two MR examination rooms

Medtron · Accutron	HP-D		Medtron ·
Application Angio	Pressure 83 bar <sup>1</sup> /21 bar <sup>2</sup>	FlowRate 0.1 – 30 ml/s <sup>1</sup> /0.1 – 10 ml/s <sup>2</sup>	Application Angio
adjustment of contrast c Cleanly defined & reprod can be achieved by push saline bolus • Wireless and mobile con		4	Highlights • Enables inter in both angio • Wireless and quickly changes such as near – Reduces ris hygienic – Integration workload fi turnaround 'Angio mode/?CT.r.

Medtron · Accutron HP		
Application Angio	Pressure 83 bar <sup>1</sup> /21 bar <sup>2</sup>	FlowRate 0.1 - 30 ml/s <sup>1</sup> /0.1 - 10 ml/s <sup>2</sup>
Highlights • Enables interdisciplina in both angiography a • Wireless and mobile co quickly change examin such as nearby power	ry clinical imaging exam ind computed tomograp infiguration provides flexi iation rooms and eliminat requirements and/or cabl tions by being easy to cle	inations hy bility to ses barriers; e installation
hygienic – Integration with the	scanner interface reduce	25
workload for the op	erator and improves patie	ent

turnaround times

<sup>1</sup>CM/NaCl/<sup>2</sup>Infusion pump

#### Accessories / Complementary Systems



#### Highlights

- Nexo [DOSE] supports compliance with imminent European Directive (2013/59/EURATOM)
- Single-server, fully automated system enables enterprise-wide data acquisition
- Multi-modality, vendor-neutral software minimizes installation time and costs
   Customized e-mail alerts help improve control and implement the ALARA\*
- principle
- Global Dose Registry for study dose comparison

\* ALARA (as low as reasonably achievable)



#### Highlights

Contrast&Care is a solution dedicated to contrast dose management. It connects to all Guerbet injectors and Hospital Information Systems (RIS, PACS, EMR...) and collects all relevant data about contrast media usage, patient history, and injector activity. Contrast&Care facilitates the traceability of contrast media and provides several tools that help imaging centers optimize contrast media consumption.



#### Highlights

Dose&Care is a state-of-the-art radiation dose monitoring solution, which allows documenting patient exams, understanding the reasons for excessive exposure and monitoring activities related to patient exposure. It provides the means to remain compliant with an ever-evolving regulation while improving the workflow and ensuring patient safety.

## THE INTERCONNECTED SOLUTIONS COME TO LIFE



Tailored interconnected solutions driving your journey to excellence

Guerbet Diagnostic Imaging has designed a portfolio of interconnected contrast imaging solutions to enhance your decision-making at each point of the patient journey from diagnosis, to treatment, to follow-up, so you can focus on what matters most, efficiently improving patient outcomes. This is UNIK.



# Interventional Systems



#### **Multi-Modality Suites**

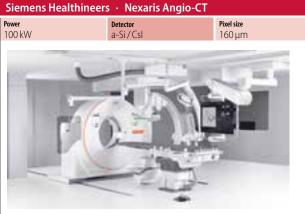




- Seamless access to multi-modality imaging
- Patient transfer without repositioning for barrier-free intraoperative imaging with Nexaris Dockable Table
- More possibilities during treatment with synergized Angio, MR, and CT image information

Canon · Alpheni	x Biplane High Defi	nition Detector
<b>Power</b> 100 kW	Detector CMOS /a-Si / Csl	<b>Pixel size</b> 76/194μm
Highlights The Alphenix Biplane to take advantage of technological innovar reduce dose for patie A revolutionary graph face and multi-tasking	the latest tions to nts and staff. ic user inter-	
enable the system to requirement for high i	, ,	e of use, efficiency and improved

workflow. In addition to helping clinicians perform their neuro, peripheral, and cardiac endovascular therapy, Canon Medical's  $30 \times 30$  cm True Hi-Definition Detector is now available for general interventional radiology. Detector size: 30 × 30 cm / 30 × 40 cm



#### Highlights

- Hybrid suite with a common coordinate system that fuses images instantly
- Direct access to angiography and CT with Quick Switching
- Efficient multi-room configurations to share imaging equipment
- · Enabling combined CT and angiography guidance in one session

#### **Bi-Plane**





common generator, table, monitors

and digital acquisition system.

ogy are key design elements of the Alphenix Dual Plane. • Detector size: 20 × 20 cm / 30 × 40 cm

#### Bi-Plane

Shimadzu · Trinias E	812/B8 Uni	ty Edition	
Power 2 × 100 kW	Detector a-Si/Csl		<b>Pixel size</b> 194 μm
Highlights • Detector size: 12" × 12" (30 × 30 cm)/8" × 8 • Wide coverage for smoor • SCORE Pro Advance imaging ing technology • Unique pioneering imaging motion-tolerant SCORE f	th operability ge process- g technology:	SCORE CT SCORE AD SCORE Navi, SMART desig Comprehens package	



## Siemens Healthineers Artis icono biplane Power 100 kW Detector a-Si / Csl Pixel size 184 µm Highlights

- ARTIS icono biplane offers great technologies for interventional neuroradiology.
- New cone-beam CT trajectory syngo DynaCT Sine Spin reduces artifacts for excellent soft-tissue resolution
- *syngo* DynaCT Multiphase integrates collateral vessel imaging in the angio suite
- Twin Spin enables seamless switching between 2D and 3D thanks to mechanical improvements



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#### Single Plane



New image chain OPTIQ enables

constant image quality using a con-

trast-driven technique (CNR\*) based

on automatic parametrization and

intelligent, self-adjusting algorithms

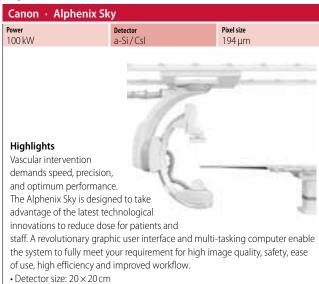
\*Contrast-to-noise ratio

Cardio intervention demands speed, precision, and optimum performance. The flexible Alphenix Core+ is designed to take advantage of the latest technological innovations to reduce dose for patients and staff.

A revolutionary graphic user interface and multi-tasking computer enable the system to fully meet your requirement for high image quality, safety, ease of use, advanced efficiency and improved workflow. • Detector size: 20 × 20 cm Canon · Alphenix Core+ High Definition Detector **Power** 100 kW Pixel size Detector CMOS / a-Si / Csl 76/194µm Highlights The flexible Alphenix Core+ is designed to take advantage of the latest technological innovations to reduce dose for patients and staff. A revolutionary graphic user interface and multi-tasking computer enable the system to fully meet your requirement for high image quality, safety, ease of use, high efficiency and improved workflow. In addition to helping clinicians perform their neuro, peripheral, and cardiac endovascular therapy, Canon Medical's 30 × 30 cm True Hi-Definition Detector

- is now available for general interventional radiology.
- Detector size:  $30 \times 30$  cm /  $30 \times 40$  cm

#### **Single Plane**

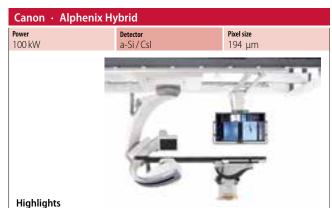




Canon · Alphenix Sky+ Power 100 kW Pixel size Detector a-Si/Cs 194 µm

#### Highlights

Nowadays 3D plays a key role in high risk procedures such as aneurysm coiling, AVM / Fistula embolization, endovascular Aortic Aneurysm Repair, etc. As its new flagship, the Alphenix Sky+ incorporates state-of-the-art technologies allowing whole 3D body coverage at 80°/sec covering a range of 210°, from head to toe without any patient or table movement and free head access. • Detector size: 30 × 40 cm



The combination of the Alphenix ceiling mounted C-Arm with a fully integrated dedicated surgical table, e.g. Maquet Magnus or Trumpf Trusystem 7500, perfectly meets the requirements for the rapidly growing number of hybrid procedures. Its flexibly designed ceiling rail system allows perfect patient access in any situation.

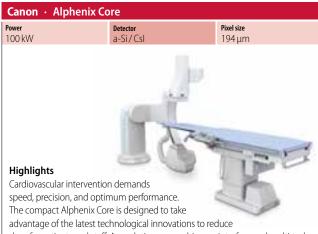
• Detector size: 30 × 40 cm / 30 × 30 cm / 20 × 20 cm

Canon · Alphenix Sky+ High Definition Detector			
Power	Detector	Pixel size	
100 kW	CMOS / a-Si / Csl	76/194µm	
	-	1	
	12	<u> </u>	
Highlights	4/2	6	
Nowadays 3D plays a key		No.	
role in high risk procedures	- Jr	Contraction of the local division of the loc	
such as aneurysm coiling,	0		
AVM / Fistula embolization		and the second s	
cular aortic aneurysm repa			
The Alphenix Sky+ incorpo	prates state-of-the-art techno	ologies allowing 3D body	
coverage at 80°/sec cover	ing a range of 210°, from hea	ad to toe without any	
patient or table movemen	t and free head access. Helpi	ng clinicians perform their	

neuro, peripheral, and cardiac endovascular therapy, Canon Medical's 30 × 40 cm True Hi-Definition Detector is now available for general interventional radiology. • Detector size: 30 × 40 cm

<b>Power</b> 100 kW	Detector a-Si/Csl	<b>Pixel size</b> 194 μm
Highlights The combination Alphenix ceiling C-Arm with a full dedicated surgici	mounted y integrated	
Maquet Magnus for the rapidly gro With its unique do body 3D coverage	or Trumpf Trusystem 7500, µ powing number of hybrid pro- puble sliding C-Arm the Alphe e, free head access and a uniq poved productivity and stunni	perfectly meets the requirements ocedures. enix Hybrid+ provides ultrafast whol ue lateral C-Arm stroke for better ng 3D images from head to toe.

#### **Single Plane**



dose for patients and staff. A revolutionary graphic user interface and multi-tasking computer enable the system to fully meet your requirement for high image quality, safety, ease of use, advanced efficiency and improved workflow. • Detector size: 20 × 20 cm / 30 × 30 cm



Shimadzu · Trinias C12 Unity Hybrid Edition Power Detector Pixel size 100 kW a-Si/Cs 194 µm Highlights • Detector size: 12×12" (30×30 cm) High sensitive detector technology for outstanding image quality SCORE Pro Advance: real-time image enhancement processing technology • High-speed C-Arm to perform 3D examinations Interdisciplinary applications: SCORE RSM, SCORE 3D, SCORE CT, SCORE Navi+Plus, Flex-APS · High flexible OR table provides an optimum radiographic area featuring a whole-body coverage



- Siemens Healthineers · Artis pheno **Power** 100 kW Pixel size Detector a-Si/Csl 160 µm Highlights ARTIS pheno - the only robotic C-arm system on the market - delivers images for preprocedural planning, intraoperative guidance, and immediate assessment Detector: zen40HDR, hi-res cristalline silicon / Csl,  $30 \times 40$ (2,496 × 1,856 px), 160 μm • Easy cleaning and disinfection - Simplify and standardize surgical thanks to a seamless exterior with procedures - with Procedural smooth surface and antimicrobial Intelligence
- Visualization of up to ten vertebrae simultaneously – with large-volume 3D scanning

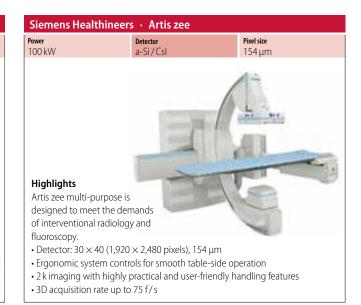


paint with significant effects on non-sporulatingmicroorganisms • Wide-space C-arm with a clearance of 95.5 cm



#### Single Plane

Siemens Healthineer	s • Artis zee, Artis Q	, Artis Q.zen
Power 100 kW	Detector a-Si/Csl	Pixel size 184 µm
Highlights The Artis floor-mounted system enables clinicians to care with ease, precisic and flexibility for small roo • Small footprint of 29 qm • Slim-line design for easy • Ergonomic system contr table-side operation • 3D acquisition rate up to • Complete 3D-portfolio ir imaging with syngo Dyn Roadmap	oms. patient access ols for smooth o 75 f/s icluding cross-sectional	



Siemens Healthineers · Artis one Power 100 kW Pixel size Detector 184 µm a-Si/Co Highlights Artis one delivers proven state-ofthe-art technology. Intelligent operation is enhanced by a configurable

- heads up display, allowing easy
- system operation and undistracted operator attention.
- Detector: as30, (1,560 × 1,420 pixels)  $\bullet$  Small footprint of 25  $\mbox{qm}^2$
- Slim-line design for easy patient access
- Ergonomic system controls for
- smooth table-side operation
- Ceiling-like flexibility and full patient coverage of 2.10 m
- Integrated 3D-Imaging and review with acquisition rate up to 66 f / s

# HUBOOK 2021

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<b>Power</b> 100 kW	Detector a-Si	<b>Pixel size</b> 154 μm
logies for interve • Excellent longi	r offers great techno- ntional radiology udinal coverage of ing most patient	S
from head to to • Lateral coverage new workflows	e of 1.90 m supporting	<ul> <li>OPTIQ technique based on automatic parametrization and intelligent, self-adjusting algorithms.</li> </ul>

• Motorized system movement without • Case Flows to personalize and standardize workflows

#### Surgical Flat Panel C-Arms

the need to move the table

Dinamik Röntgen · C-arm DR System			
Power	Detector	Pixel size	
5 kW	23×23 cm	179 µm	
meets all hospita	ntgen X-ray systems al's requirements friendly interface	• 5kW-F:20mA R:100mA-80mA	
· ·	· ·		5-HF
Fully motorized		• 0.3 × 0.6 mm - 200 kHU tube	
<ul> <li>Cheap mainten</li> </ul>	ance and spare parts	<ul> <li>1.280 × 1.280 pixels FPD</li> </ul>	

- ap maintenance and
- Light weight
- · Esthetic and smooth design
- Auto stitching function
- 1,280×1,280 pixels FPD
- 2 x 22" workstation Image processing software DSA-Road Mapping

#### Surgical Flat Panel C-Arms

Fujifilm · FDX Visionary-C and CS		
Power 5 – 20 kW	Detector Csl	<b>Pixel size</b> 154 – 205 μm
engineered for fas and advanced im • FDX Visionary-CS one design and b landscape monit	's compact all-in built in large 27" or allows improved	
access in smaller	rooms. •.	$21 \times 21$ cm and $30 \times 30$ cm amorphous

• FDX Visionary-C's perfectly balanced lightweight C-arm and dual 21.5" touchscreen monitor cart provides fast accurate positioning and ultrasharp image viewing.



dedicated 'radiography mode' for high quality still imaging



21×21 cm



3D-imaging

GMM Group · Symbol FP – Mobile C-Arm System

Detector

Power 20 kW

Highlights

urology.

Power 32 kW

 State-of-the-art flat panel technology for outstanding

• Detector size: 26 × 30 cm

Medtronic · O-arm System

performances and superior image quality for any imaging activity in operating room.

management of the operating parameters.

· General and vascular surgery, neurosurgery, cardiology, gastroenterology,

• Exclusive user interface with LCD touch screen display ensuring complete

· Easy patient positioning thanks to the wide C-Arm opening.

Detector

- 3D scan volume up to 40 cm width Seamless integration in OR workflow
- · Easy in use: All motions motorized,

Siemens Healthineers · Cios Alpha

- simple control panel
- scan positions
- · Easy draping of the breakable gantry · Seamless integrating with Stealth-
- Station Navigation New 2D long-film option allows AP
- and lateral imaging up to 45 cm length



Highlights

and Generator

- More certainty in demanding cases with intraoperative guality control based on dedicated 3D technology
- More efficiency in intraoperative 3D imaging
- More cost-effectiveness in surgery through intraoperative corrections based on 3D images



- Up to 25 percent more coverage<sup>1</sup> even during image rotation thanks to smart collimation
- Retina technology enables surgeons to see the details they need to see • Improve efficiency in your clinical workflow – with remote control unit<sup>2</sup>,
- electromagnetic brakes, and a wireless footswitch<sup>2</sup>
- <sup>1</sup> Compared to conventional 33 cm image intensifiers <sup>2</sup> Option



Pixel size

154 µm – 184 µm

#### Surgical Flat Panel C-Arms



• Intuitive use, low weight, and easy maneuverability -for easy system operation and more ease in the OR

- Boost system utilization with a multipurpose system that can be used across a variety of disciplines
- · Safeguard data and access with advanced cyber security

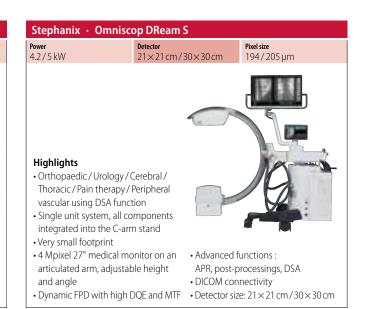


- - APR, post-processings, DSA DICOM connectivity
- Adjustable height & angle of medical displays
- Detector size: 21 × 21 cm/30 × 30 cm

SternMed · Xenox C400 Power 30 kW Pixel size 200 µm Highlights Xenox C400 (with flat panel) 30×30 or 21×21 cm • Digital memories: 1.5k×1.5k, with • E-Motion system: C-arm movements, acquisition up to 25 fps  $1k \times 1k$ fully motorized (optional) • 30 kW H.V. generator • 215 mm horizontal run Dual cooling systems for immediate (17 mm in motorized version) and effective heat removal Wide orbital movement 150° • Dual power system: Power reserve C-arm lateral rotation: ± 180° • 10" touch screen control console system



- Retina FD technology See more anatomical details with flat-detector imaging • Productivity - streamline your work with smart touch user interface, wireless
- footswitch<sup>1</sup>, and easy patient positioning
- Reliability experience 99.8% system availability<sup>2</sup>
- <sup>1</sup>Option <sup>2</sup> Average system availability over the entire Siemens C-Arm installed base





· Removable grid and motorized filters for pediatric application

 CD/DVD and USB for image exporting Full DICOM connectivity

Ziehm · Vision RFD 3D

Bundling 2D and 3D function-

ality for greater intraoperative

control, the Ziehm Vision RFD 3D

\* In combination with dedicated cardio packages

tions as well as for demanding multidisciplinary use.

Detector size: 31 × 31 cm (CMOS) · 30 x 30 cm (a-Si)

Power

25/30\* kW

Highlights

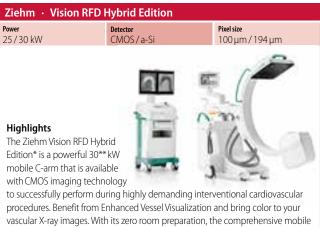
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Detector

CMOS/a-S

#### Surgical Flat Panel C-Arms



solution easily takes your OR to the next level. Detector size: 31 × 31 cm / 20.5 × 20.5 cm (CMOS) · 30 × 30 cm (a-Si)

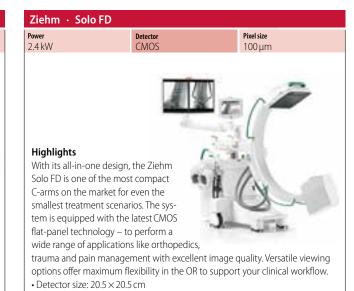
\* Ziehm Vision RFD Hybrid Edition represents a group of optional hardware and software that creates an option package on the device named Ziehm Vision RFD. \*\* In combination with dedicated cardio packages



and demanding procedures and the intuitive Ziehm usability concept\* helps surgeons ensure consistently high clinical standards. This impressive feature lineup make the systems ideal for challenging interventions.

• Detector size: 31 × 31 cm / 20.5 × 20.5 cm (CMOS) · 30 × 30 cm (a-Si)

\* The Usability Concept includes a variety of hard- and software features. Due to regulatory reasons the availability of each feature may vary. Please contact your local Ziehm Imaging sales representative for detailed information.



#### Ziehm · Vision FD Power 2.4 kW Pixel size Detector CMOS/a-Si 100 µm / 150 µm Highlights Now in the upgraded CMOSline\*, the Ziehm Vision FD features an enhanced imaging chain for excellent image quality and thanks to the Advanced Active Cooling - is designed for continuous use. In addition, finely tuned workflows and new software features help to optimize

Ziehm Vision RFD 3D ideal for high-end orthopedic, trauma and spinal interven-

patient outcomes and further increase productivity. The Ziehm Vision FD is now also available with a 31 × 31 cm / a-Si flat-panel. The bigger detector size allows to cover larger anatomical regions in orthopedic and vascular surgery. Detector size: 20.5 × 20.5 cm (CMOS) · 31 × 31 cm (a-Si)

\* CMOSline represents a system configuration that is based on a Ziehm Imaging CMOS flat-panel detector

#### Surgical II-C-Arms



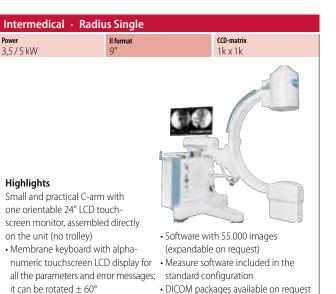
- and powerful performance · High performance with high resolution image and lower dose
- Dose reduction through various pulsed fluoroscopy modes
- Seamless compatibility with DICOM3.0 • Wider SID, wiser operation • Two control panel on both side
- C-arm movement fully counter
- balanced
- 19" dual monitor (43" monitor is option)



- also by 146° orbital mouvement with 56° overscan.
- 9" to 13" triple field Image Intensifier, 1K CCD



- Touchscreen user interface
- High configuration cart with two
- 19" medical monitors
- Remote control
- (expandable on request)
- Laser for patient centering
- CD/DVD and USB for image exporting
- Full DICOM connectivity





Flexible upgradeability



- High image quality combined with IDEAL (Intelligent Dose Efficiency Algorithm) dose management
- <sup>1</sup> Average system availability over the entire Siemens C-Arm installed base

Siemens Healthineers · Cios Select

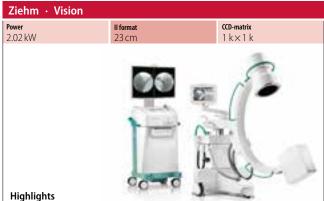
#### Surgical II-C-Arms

SternMed · Xenox C200		
Power 5 kW	<b>ll format</b> 9"/12"	CCD-matrix 1 k×1 k
Highlights • DSA 25 frames/ses • 2 × 19" active matrix LCD, anti-glare and hard coated (standard) • 2 × 19" TFT with 2000:1 contrast ratio (optional)	j.	C I
<ul> <li>TB hard disks up to 44 storage capacity</li> <li>Full Dicom (optional)</li> <li>200 mm horizontal C-ar</li> <li>Orbital movement 125°</li> <li>12° on each side C-arm measure &amp; cine software</li> </ul>	m run swiveling	<ul> <li>270° on each side arm rotation</li> <li>Dose meter (DAP meter)</li> <li>Touch screen keyboard with 5.7" LCD display with the possibility to rotate of ± 60°</li> <li>1k CCD camera delivers sharp and detail-rich images</li> </ul>



Villa Sistemi Medicali · Arcovis 3000 S/R CCD-matrix **Power** 3.5 – 15 kW **Il format** 9" / 12  $0.5 \times 0.5 \text{ k/1} \times 1 \text{ k}$ Highlights

- Application in urology, cardiology, orthopedics and general surgery
- Choice between fixed anode (3000 S) or rotating anode (3000 R) versions
- Choice between either 9" I.I. (with stationary or rotating anode) or 12" I.I. (with rotating anode)
- Choice of 0.5 × 0.5 k or 1 × 1 k camera and several image storage options to satisfy all applications
- Premium version with 15 kW power, 9" or 12" I.I., 1 × 1k camera

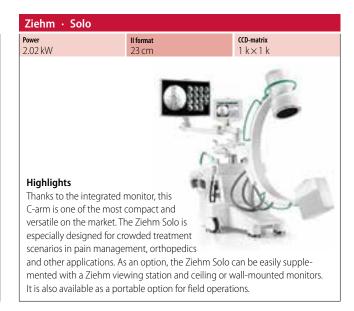


As the basic technology platform for all mobile imaging systems in the Ziehm Vision family, this C-arm suits the broadest spectrum of surgical applications. Thanks to its liquid cooling system, the Ziehm Vision is designed for continuous use even during longer procedures. Packed with leading-edge functionality, the Ziehm Vision sets a standard in mobile imaging and ensures minimized dose levels.

## Ziehm · Vision R Power 20 kW CCD-matrix ll format 23 cm/31 cm $1 k \times 1 k$

#### Highlights

Equipped with a powerful monoblock generator with rotating anode technology, the Ziehm Vision R combines excellent image quality with minimized dose levels. The outstanding power reserves make this C-arm particularly suited for demanding procedures in cardiovascular surgery and interventional cardiology, including AAA, PTCA and coronary angioplasty.



#### Accessories / Complementary Systems





and excellent reliability.



- Our unique liquid metal bearing technology
- · Compact Housing provides a long tube life, quiet operation, high stability, and excellent reliability.



- Biopsy breast phantom
- Vascular access training phantom



- Rotating anode X-Ray tube unit designed for mobile c-arm equipment · Lead lined single piece aluminium body, internal pump for oil circulation,
- to improve thermal exchange
- Choice of HT cable socket: Parker or Claymount mini
- Optional remote water-air heat exchanger increases heat dissipation to 500W continuous for demanding interventional applications
- Water cooling can be mounted or upgraded on field

#### Siemens Healthineers · Corindus CorPath GRX



#### Highlights

- The first robotic platform designed for interventional physicians
- · Enables precise measurement of anatomy and device positioning
- Added benefit of radiation protection for the physician and the potential to reduce radiation exposure for staff and patients
- technIQ Smart Procedural Automation provides predictable and consistent movements that aid in advanced navigation, lesion crossing, and device manipulation during complex coronary and peripheral interventional procedures



#### **Artificial Intelligence**

# Canon · Advanced intelligent Clear-IQ Engine for MR

#### Highlights

The power of AI is brought to routine MR imaging by Canon Medical's Deep Learning Reconstruction technology: Advanced intelligent Clear-IQ Engine (AiCE). AiCE is the world's first fully integrated DLR technology for MRI and produces exceptionally detailed MR images. AiCE intelligently removes the noise from the images, which results in higher SNR enabling increased resolution or decreased scan time.



#### Highlights

Automation Platform is an Al-based, zero-click solution that uses Deep Learning technology to streamline your workflow for fast, actionable results every time. <sup>Auto</sup>Stroke solution automatically analyzes images to fully characterize stroke conditions and integrates a comprehensive set of stroke applications: • Non-contrast CT Intracranial Hemorrhage • CT Perfusion maps • CT Large Vessel Occlusion

#### Canon · Advanced intelligent Clear-IQ Engine for CT



#### Highlights

The power of AI is brought to routine and spectral CT imaging by Canon Medical's Deep Learning Reconstruction technologies: Advanced intelligent Clear-IQ Engine (AiCE) and Spectral Reconstruction. AiCE is the world's first fully integrated DLR technology for reconstruction of noise free CT images. AI in Spectral Reconstruction results in a zero temporal off-set between low kV and high kV data sets.





## REiLI

#### Highlights

Under the REiLI brand, Fujifilm is developing AI technologies that strongly support diagnostic imaging workflow, leveraging the combination of deep learning and Fujifilm's image processing heritage. Working with both Fujifilm developed algorithms and market leading specialist vendors, the REiLI platform can automate alerts and send critical information directly to the relevant clinician, increasing both the speed and accuracy of diagnosis and augmenting the decision making process.

Fujifilm · FDR EX-M1 AI box

#### Highlights

- Fujifilm expands AI CAD software integration across its modality portfolio to include the ground breaking ultralight compact portable X-ray system, FDR Xair and room solutions<sup>1</sup>.
- Integrated AI CAD software Lunit insight CXR-MCA provides abnormality score by heatmap.
   Integration dependent on equipment configuration

Main chart shoemalities including

- Major chest abnormalities including nodule, consolidation, pneumothorax, atelectasis, fibrosis, pleural effusion, pneumoperitoneum and mediastinal widening supported
- Providing an advanced workflow and improved patient care pathway both inside and outside the hospital environment

# RADBOOK 2021

Please visit us at healthcare-in-europe.com

#### **Artificial Intelligence**

#### Gleamer · BoneView

#### Highlights

BoneView is an AI assistant that detects lesions in trauma X-rays, fully integrated in radiology and emergency workflows.

- Increasing diagnostic performances
   (30 percent reduction of missed fractures):
   "In a context in which exam workload is getting higher, Al allows us to reduce human errors" (user)
- Improving productivity "on top of obvious time saving, radiologist's comfort is improved
- by this instant and automated second reading" (user) •"BoneView allows to reduce litigatious procedures linked to undescribed
- fractures" (user) CE mark Class IIA, installed in +130 sites

Hologic · 3DQuorum



#### Highlights

3DQuorum technology utilises Genius Al-powered analytics to uniquely reconstruct high-resolution 3D Mammography data to produce 6 mm Smart-Slices. These speed up reading time by reducing the number of images to review, with no compromise in image quality, sensitivity or accuracy.<sup>1</sup> Accelerate detection with our newest innovation reducing your read times by an hour a day.<sup>1</sup>

<sup>1</sup> Data on File: Clinical Study Report CSR-00116

#### iCAD · ProFound AI Risk



#### Highlights

ProFound AI Risk is the first and only solution that uses a mammogram to provide women with a personalized two-year breast cancer risk estimation. This unique and accurate solution combines aspects within the mammographic images from a standard bilateral two-view full field digital mammogram, as well as age and breast density, to provide an absolute short-term breast cancer risk score. Scores are classified into four risk categories: low, general, moderate, and high.

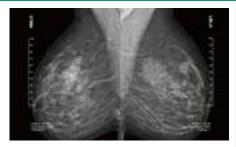
Hitachi – Diagnostic Image Support Solutions



#### Highlights

Hitachi's diagnostic image support solutions are designed to improve the quality and efficiency of image diagnosis, using digital technology such as Al. Hitachi is now working on the next level of Al to not only improve disease detection such as early diagnosis but also enhance risk prediction and prevention of diseases.

#### iCAD · ProFound AI for 2D and 3D Mammography



#### Highlights

iCAD, with 20 years of experience, is the proven market leader in breast artificial intelligence. ProFound AI for 2D and 3D mammography detects and assesses malignant soft tissue densities and calcifications, and is extremely performant in subtle, hard to detect lesions such as those found in dense breasts. Proven clinical results show ProFound AI for DBT decreased radiologist reading time in half, while improving their breast cancer detection rates by 8% and specificity rates by 7%. iCAD's breast health solutions suite also includes Density Assessment and ProFound AI Risk, the only two-year breast cancer risk tool based on a mammogram.



#### Highlights

mdbrain is an easy-to-use, platform independent & economic software solution for brain volumetry and the characterization of white matter lesions. mdbrain uses a combination of several deep learning methods to derive meaningful, well-visualized quantitative reports from MR images. The seamless integration into customers' local PACS allows for fast processing and the best possible data protection.

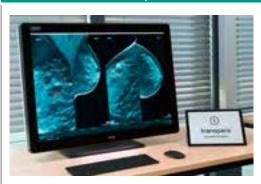
#### Artificial Intelligence



#### Highlights

ME is the first laptop ultrasound system powered by ZST+ platform. Its AI empowered analysis tools, smart cardiopulmonary assessment solution, help to quickly assess patient status under critical care environment.

#### ScreenPoint Medical · Transpara



#### Highlights

ScreenPoint Medical is the leading developer of AI driven image analysis technology for automated reading of 2D and 3D mammograms. With proven accuracy matching experienced radiologists, Transpara is the most advanced commercially available multivendor AI solution (CE marked and FDA cleared for 2D and 3D). Contact us for more information.

#### Siemens Healthineers · AI-Rad Companion



#### Highlights

The AI-Rad Companion, a family of AI-powered, cloud-based augmented workflow solutions, helps you to reduce the burden of basic repetitive tasks and may increase your diagnostic precision when interpreting medical images. Its solutions provide automatic post-processing of imaging datasets through our Al-powered algorithms. The automation of routine workflows with repetitive tasks and high case volumes helps you to ease your daily workflow so that you can focus on more critical issues.

radiologie

#### Therapixel · MammoScreen



#### Highlights

MammoScreen: an Al-based concurrent reading aid for interpreting screening mammograms. It detects and characterizes suspicious regions of the breasts and generates a summary report containing the recommended action for the mammogram level and characterization of lesions and breasts suspiciousness.

- Trustable characterization score, clear recommended actions
- More confident decision making
- Workflow untouched
- Optimal human / machine complementarity CE mark pending

Profestation



Magazien

COVID-19

# IT Systems



#### RIS



Secured access

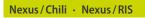
- Integration of received reports (specification depends on cooperating system)
- · Fast and efficient creation of reports for treatment without delay



#### Highlights

or imaging center.

medavis RIS manages the radiology workflow from appointment booking, examination, reporting to billing. The basis are optimal digital workflows and perfectly integrated interfaces to PACS, HIS and other systems. Additional modules support digital communication with patients, referring physicians or clinical staff.





#### Highlights

- Modern and intuitive user interface
- Scheduling and resource management
- · Seamless integration with all our radio-
- logy products, e.g. PACS and portals
- Context-sensitive integration of 3rd party solutions, e.g. speech recogni-

tion, structured reporting and dose management

- · Integration server for the management and monitoring of DICOM or HL7 interfaces
- Business intelligence tools

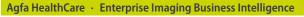
#### medigration · RIS/PACS



#### Highlights

Our RIS / PACS solutions are designed for multisite and manufacturerindependent networks. The WinRadiolog RIS product portfolio implies the whole patient management for your medical institution. Our PACS product portfolio comprises a proven DICOM archive, an intuitive operating reporting 3D ImageVision workstation, teleimaging and mobile solutions, patient CD system dose management software solution ..

#### **Business Intelligence**





#### Highlights

Easy access to the information you need through standard and customizable reports. Your Enterprise Imaging solution contains a wealth of information about your healthcare enterprise and its operations. Agfa HealthCare Business Intelligence reports are a cornerstone in better understanding operational realities, identifying areas for focused improvement and help build efficiency gains.

#### **Business Intelligence**



#### Highlights

RadCentre Analytics offers an integrated solution for specific data analysis and interactive reporting to increase performance in radiology.

- Predefined and high performant processing of operating figures
- Unlimited analysis options for optimisation of business outcomes
- Integrated data warehouse solution
- Visualization of radiation exposure extracted from PACS

#### medavis · cockpit4med Radiology Dashboard



#### Highlights

cockpit4med provides dashboards with key management data of a radiological facility in real time, independent of location and at any time. This accelerates the derivation of targeted measures and shortens response times. The solution uses the latest technologies and is intuitive to use.

Siemens Healthineers · teamplay myCare Companion

# Siemens Healthineers · eHealth Solutions

#### Highlights

eHealth Solutions fosters collaboration among healthcare providers, while enabling you to improve patient outcomes and increasing patient safety. Improved data transparency helps you to avoid unnecessary costs caused by duplicate examinations and additional administrative efforts and supports you in optimizing resources that may otherwise be tied to fragmented IT and infrastructure maintenance.

## 

#### Highlights

teamplay myCare Companion is a telehealth solution for management of a variety of chronic conditions. It enables integrated, centralized monitoring from a wide variety of third-partymonitoring devices. An intuitive mobile app helps increase patient engagement – key to improving outcomes in chronic disease management – and helps patients connect to monitoring devices.

Siemens Healthineers · teamplay



#### Highlights

teamplay applications for performance management in healthcare help you make quick and well-informed decisions by offering a clear overview of your clinical and operational performance data.\* The set of teamplay performance management applications gives you instant, centralized access to operational, technical and clinical data to help you optimize your operations and to deliver higher quality of care. Smart connections between the applications amplify the data insights and provide a seamless user experience.

\* teamplay Protocols and teamplay Fleet supports (selected) Siemens scanners Please contact your Siemens representative for more details

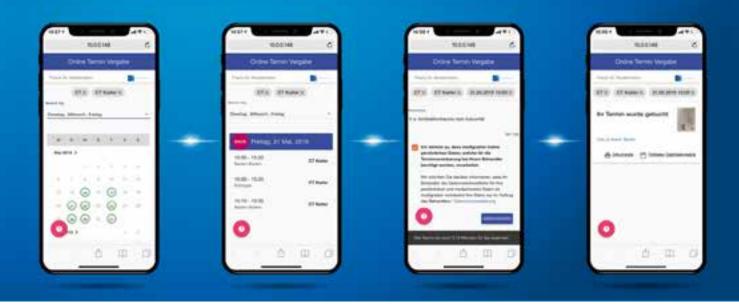
#### Siemens Healthineers · teamplay Usage



#### Highlights

teamplay Usage\* is an utilization management solution that helps to optimize imaging operations and increase efficiency. teamplay Usage brings workflow transparancy in your radiology department, helping you to understand how to increase the productivity of your imaging fleet and balance resources more efficiently. • Monitor your KPI's to better understand your workflow

- Drill down from a whole modality to a single procedure to discover patterns
- like long idle times and exam durations
- Identify best practice workflows by benchmarking between locations and scanners
   \* Please check if teamplay is available in your country



# Intelligent IT

## Online appointment scheduling for optimum equipment utilization in real-time

Over the past few years, modern appointment management has found its way into German medical practices. Nevertheless, there is significant room for improvement as some doctors can still be contacted only by phone and only during office hours. Now, medigration GmbH offers a solution: a web-based appointment scheduling system that is an add-on to the radiology information system (RIS). "Many commercially available appointment management systems are geared towards a wide range of medical specialties. We decided to create an add-on specifically for radiology practices and integrated it in our multi-portal platform," explains managing director Markus Steinlein.

Patient appointment scheduling in radiology can get very complex, particularly when different sites are involved, since the scheduling team have to ensure balanced imaging equipment utilization. Moreover, the many calls the scheduling team have to field and poor plannability – because patients are late or no-shows – strongly impacts overall practice management and indeed the economic sustainability of the radiology service provider. "We integrated appointment scheduling in our RIS to enable optimal equipment utilization in real-time," says Steinlein. In other words: all sched-

uling rules defined in the scheduling tool can be applied for online appointment booking. The add-on offers radiology practices a further communication channel with patients and referring physicians. Thus, the radiologists can control the types of services they want to offer.

The workflow of the appointment scheduler can be either automated or moderated. "A moderated process has the advantage that the patients can enter their preferred times and the staff can process these requests quickly," says Steinlein. "Particularly with complex examinations this workflow leads to additional appointment bookings." Automated scheduling means that the scheduling team immediately see when an online request is being processed. "The moment a patient chooses a time slot, this slot is flagged in the scheduler. When the booking is completed, the appointment is fixed. If the patient abandons the booking process, the flagged time slot is available again."

#### Mobile use

The add-on is available for desktop and for mobile devices. If patients book via a smartphone or tablet they can enter the time and day in their calendar and can even download additional information such as directions. "Moreover, the patients can take a photo of their referral document and upload it to the system," Steinlein reports. "Thus the required patient data doesn't have to be entered manually – which removes a potential source of error. At the same time, the moderated workflow includes the referral document which contains the type of exam the referring physician has requested."

#### Privacy

Unlike other appointment scheduling systems, the medigration add-on is not strictly cloud-based. "A webserver is part of our multi-portal platform. Its main purpose is the transmission of images and reports, but with regard to the scheduler it is a secure link to the appointment planner in the radiology practice," says Steinlein. The data the patient provides in the course of the booking process is not permanently stored on the webserver but is simply passed through. "The actual data processing and storage happens in the radiology practice and the radiologist controls the data," Steinlein underlines.

www.medigration.com



In 2000, Markus Steinlein completed his informatics studies at Georg Simon Ohm University of Applied Sciences in Nürnberg, Germany. From 1999 to 2003 he was managing director of WSO Informatik GmbH. In 2003 he joined medigration GmbH as a software developer and was appointed head of software development in 2010. Since 2014 Steinlein has been the company's managing director in charge of software development and quality management.

Markus Steinlein is managing director of medigration GmbH

#### **Business Intelligence**

Siemens Healthineers · teamplay Protocols



#### Highlights

teamplay Protocols\* is a protocol management system that facilitates remote access to your scanners, thus enabling central protocol management to ensure high quality of care and standardization throughout your whole organization.

- Perform systematic quality reviews easily
- Identify best practice scan protocols
- Save time and resources by remote editing, distributing and sharing protocols \* teamplay Protocols is an application to manage scan protocols and edit protocols remotely by connecting to Expert-i. It does not directly influence the scanner in its operation. teamplay Protocols for eligible Siemens CT, MR and PET/CT scanners only

Canon · Vitrea Advanced Visualization



#### Highlights

- Suite of advanced applications provide full-powered solutions for 2D, 3D and 4D advanced visualization used to process and analyze clinical data from multiple modalities – MRI, CT, CR, DX, RG, RF, US, XA, NM, PET, PET/CT and SPECT
- Modular viewing platform that provides a broad range of clinical applications for cardiology, neurology, oncology, women's health and MSK
- With multi-vendor support, Vitrea's broad range of clinical applications can be
- used to read data for all the major vendors' equipment

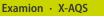
#### PACS

Agfa HealthCare · Enterprise Imaging for Radiology



#### Highlights

Agfa HealthCare Enterprise Imaging for Radiology is a unified imaging management platform that provides PACS, reporting, advanced image processing capabilities and integration of clinical information. The solution offers diagnostic tools and powerful task-based workflow, designed to achieve gains in clinical productivity.

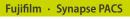




#### Highlights

Universal software platform for radiological image acquisition and management of all medical image data.

- High quality images in a few clicks
- Intuitive GUI with clear menu structure and icons
- Modular architecture, adaptable to all needs
- Certified diagnostic viewer with comprehensive measurement functions





#### Highlights

Synapse PACS is a 100 percent web based, intuitive and scalable solution to meet your exact needs anywhere and at any time, with on demand access and fast image display. Synapse improves efficiency and workflow whilst enhancing access to patient data. Its scalable architecture enables the same product to be installed in any setting. Synapse offers integrated clinical tools, advanced visualisation modules and mammography functionality.

#### Image Information Systems · iQ-System PACS



#### Highlights

iQ-System PACS is an easily configurable, highly scalable picture archiving and communication system. It is installed in more than 10,000 facilities ranging from small, individual, imaging centers to large multi-modality, multi-site hospital installations across 118 countries. It is full-featured, state-of-the-art, robust and reliable, and available in most major world languages.

#### PACS



🗵 Mammo MR Screening Calcium scoring (FA

 $\boxtimes$ Curonaries / heart

Lung

EP planning  $\times$ Functional Imaging

- $\times$ Stroke
- Vessel measurement
- Virtual colonoscopy

Nexus/Chili · PACS



#### Highlights

- · Easy to use, high performance examination and analysis system for radiological routines
- Access to all images (including previous images) within seconds
- Unique and hierarchical data compression without any loss
- Individually configurable hanging protocols
- · Independent individual scaling of your interfaces



Our RIS / PACS solutions are designed for multisite and manufacturerindependent networks. The WinRadiolog RIS product portfolio implies the whole patient management for your medical institution. Our PACS product portfolio comprises a proven DICOM archive, an intuitive operating reporting 3D ImageVision workstation, teleimaging and mobile solutions, patient CD system dose management software solution ..

### Nexus/Chili · Import PACS



dicomPACS is a sophisticated, high-tech image management solution based on VNA technology. With dicomPACS, all images generated by digital X-ray, CT, MRI

and ultrasound devices, as well as diverse documents (e.g., doctors' letters ...) are stored in a digital patient folder and readily accessible. Our carefully

designed archive and backup solutions guarantee quick access to all data and

- Multimedia PACS
- One viewer for all areas
- Scalable (practice to enterprise)
- Multitenancy
- Fail over and load balancing
- Archiving in existing systems

OR Technology · dicomPACS

- with HIS/RIS
- Supports multiple IHE workflows
- Referring physician access
- Teleconferencing
- Consultation
- Portal functionality



#### Highlights

- PACS for external data from CD/teleradiology
- Temporary archive in addition to
- regular PACS · Manual web-based import
- Automatic import with import robot
- Data reconciliation with own IDs (IHE compliant)
- Delivery to regular PACS
- Adjustable automatic data removal
- DICOM Q/R capable
- Works with any other PACS

#### Siemens Healthineers · syngo.plaza



#### Highlights

- syngo.plaza is the smart PACS for reading and reporting a large variety of cases - from routine to complex.
- Centerpiece robust performance, intuitive operation and intelligent reading tools • Smart PACS – 3D technology, powerful storage capacities and vendor-neutral
- archiving even enterprise-wide
- Lasting investment highly scalable long-term solution growing with your plans

Highlights

high security standards.

#### VNA

#### Agfa HealthCare · Enterprise Imaging VNA



#### Highlights

A robust solution for enterprise archiving of DICOM and non-DICOM data. As part of the Enterprise Imaging solution, the VNA consolidates all your imaging data, from multiple systems, departments, facilities and vendors, into a central clinical data foundation. Your data ownership, migration and storage costs are reduced, while management is simplified.

#### Fujifilm · Synapse VNA



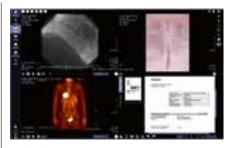
#### Hiahliahts

Synapse VNA is our award winning (Best in KLAS 2019, 2020) Vendor Neutral Archive. It is the core building block of an enterprise imaging architecture, with a vendor neutral best of breed approach; it is a secure, scalable, standard-based application allowing clinicians and healthcare providers to access any relevant clinical object. Focused on all medical data, DICOM and native non-DICOM objects. Synapse VNA can also enable easy upload of content from the desktop or mobile device, helping Healthcare providers to reduce silos and ensure all data is available when a clinician needs it.



- · Very well suited for teleradiology
- Referring physician access
- User concept with roles and rights
- Security measures
- Data compression (lossy & lossless)
- Suited for reporting (MPG class IIb)
- Works with any PACS

#### Siemens Healthineers · next generation VNA



#### Highlights

Enterprise-wide clinical image data management (IDM) made easy: Your data strategy to lead the future. IDM is the universal solution that meets the requirements of a powerful enterprise data management solution for managing, sharing and archiving clinical data independent of format and origin (DICOM and Non-DICOM). Scalable storage capacities allow data management across departments.

- Patient-centric storage
- Virtual patient CD app
- Single point of integration · Cost-saving data management

Image Information Systems · iQ-View

 Universal zero-footprint enterprise viewer

#### Reading



#### Highlights

Synapse 3D is Fujifilm's vendor-neutral advanced visualization platform with more than 50 clinical modules. The advanced pre-surgical planning tools allow surgeons & clinicians to plan the most efficient, least invasive surgical activities supporting clinical teams to provide the best possible patient outcomes.



#### Highlights

iQ-View is the vendor neutral easy-to-use multimodality reading station that has been designed by radiologists for imaging specialists. A unique previous study management using artificial intelligence accelerates the diagnostic process by automatically presenting relevant previous studies of any modalities. iQ-View Pro automatically merges different patient identities from any PACS.

#### Reading



#### Highlights

 Cloud-delivered enterprise imaging platform featuring a single integrated database providing a unified view of your patient and patient care

 Specialized viewing tools, including 3D mammography, echo/stress echo and ortho

- Custom workflow engine enables Exa to meet unique workflow
- · Zero footprint viewer plus server-side rendering enable viewing any modality from any location
- requirements and goals Advanced analytics and dashboards
- to optimize your imaging business

#### Nexus/Chili · Diagnost



#### Highlights

- Independent of modality
- CT, MR, CR, DR, PET, PET-CT, US, XA, ...
- Independent of OS Integrated teleradiology
- Extensible by other applications
- HIS / RIS integration
- Mammography Radio therapy
- Powerful hanging protocols
- Consultation functionalities
- Teleconferencing

#### Siemens Healthineers · syngo Dynamics



#### Highlights

syngo Dynamics is a single, enterprise wide, multi-modality intelligent reading and structured reporting platform to streamline data transfer and workflow. It helps enable high quality outcomes, efficient workflows, and improved operational efficiency

- Efficient workflows: Enables healthcare teams to quickly and easily access study data
- Consistent data: Quickly connect to the right data and avoid missing or conflicting data, to enable high-guality outcomes and faster reimbursement
- Simplify operations: A single platform that helps coordinate care across the continuum

#### **Mammo Workstations**

#### Fujifilm · Amulet Bellus II



#### Highlights

- Multi modality diagnostic workstation
- Tomosynthesis reconstruction for time saving image transfer
- Customizable GUI and workflow
- Report functionality and 3rd party report integration
- Can be integrated into existing environments
- Up to five clients

#### Siemens Healthineers · syngo.via

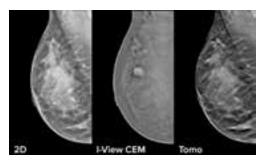


#### Highlights

syngo.via is the intelligent, integrated imaging software, which offers multimodality and fast 3D reading, innovative and Al-powered applications. It speeds up your routine and provides actionable imaging based results to enhance care delivery and outcomes.

- Simplifying routine streamlined reading and reporting with powerful tools and integrated reporting solutions
- Empowering innovation latest technologies and syngo.via open apps provide a gateway to innovations and boost your clinical capabilities
- Adapting to you integrating seamlessly into your IT environment and growing with all your medical and operational needs from workstation to multi-site

#### Hologic · I-View 2.0 Contrast Enhanced Imaging



#### Highlights

I-View 2.0 Contrast Enhanced Mammography software captures both anatomical and functional information in one exam by leveraging the ability to provide 2D, contrast and tomosynthesis images all under one compression. The smooth, lower dose contrast image preserves the high-definition image guality helping increase diagnostic confidence guiding the clinical pathway from diagnosis to surgical management as an effective alternative to MRI.

#### Mammo Workstations

#### Hologic · Quantra 2.2 Breast Density Assessment



#### Highlights

Powered by machine learning analysing each patient's individual breast tissue pattern and texture, Quantra 2.2 allows the radiologist to confidently assess a breast density category based on a four-point scale similar to Bi-RADS 5th Edition. Quantra 2.2 available on the acquisition workstation and can help facilitating the implementation of high-risk/density-based patient management protocol at the point of care.

Siemens Healthineers · syngo.Breast Care



#### Highlights

*syngo*.Breast Care is the advanced reading and reporting solution with powerful tools for efficient screening and comprehensive multimodality diagnostics.

- Choose the most suitable solution from a stand-alone workstation to a
   multiple-user server
- Customize your automated reading workflow to your personal preferences
- Easily include multimodality and 3D ultrasound reading, synthetic views, contrast enhanced mammography, breast density and CAD information
   Integrated CAD solutions with interactive decision support based on highly
- trained Al-based algorithms

#### Pathology

#### Fujifilm · Dynamyx



#### Highlights

Dynamyx is a vendor-agnostic, end to end digital pathology solution which can be integrated with any lab information system (LIS/LIMS) or digital slide scanner. Supporting LEAN workflow and collaboration (including online sharing). It allows pathology departments to move to digital at their own pace and allows the integration of any scanner or Al vendor via an open API throughout the life of the solution. The mature platform was designed by pathologists for pathologists and brings all of the tools to enable a pathology department to digitise and introduce LEAN working with minimal disruption and without any vendor lock in.

#### medigration · MammoView

 Default display protocol
 Hi-Res displays or mixed setups
 Digital dictation integration
 Dedicated keypad
 WebClient

#### Highlights

- Extremely easy to use and manage
- Direct findings in the image
- CAD support (optional) and a second
- view area to examine US and MRT
- workflow
   Outstanding image quality
  (2,048 greyscale)

Hanging protocols can be configured

individually to automate your routine

#### **Remote Scanning**

images

#### Siemens Healthineers · syngo Virtual Cockpit



#### Highlights

syngo Virtual Cockpit, a software for remote scanning assistance, lets you make the most of your imaging devices. Medical staff can use this software solution to connect remotely to scanner workplaces to assist personnel at a different location, especially where more sophisticated examinations are required. • Boost confidence by sharing in-house expertise

- Enhance patient satisfaction by improving availability
- Relieve cost pressure by enhancing flexibility

#### Portal Solutions

#### Image Information Systems · iQ-Web Porta



#### Highlights

crypto web links

- Share medical results, imaging studies and reports with your patients, referring or external reading
- physicians • Access studies in full diagnostic quality via QR code, direct login or
- Share portal access e.g. via WhatsApp, paper-based QR codes or direct HIS/RIS/EMR integration
- No client installation or registration required
- HIPAA and GDPR compliant patient data sharing

#### **Portal Solutions**

# i-Solutions Health · RadCentre Patientenportal

#### Highlights

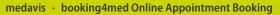
The RadCentre Patientenportal supports image and report communication between doctors and patients and improves utilization in medical facilities and clinics.

- · Efficient appointment management for optimized processes
- Direct data exchange with referring physicians and patients
- · Provision of information sheets and consent forms before examination



#### Highlights

With portal4med, referring physicians have direct online access to their patients' radiological reports and images. Patients can access their own records online and make them available to other physicians. The data transmission is GDPR compliant and in accordance with the highest security standards.





#### Highlights

booking4med is an online appointment solution for patients and referring physicians hosted in Germany. Thanks to the deep integration, appointments are automatically mapped in the medavis RIS scheduler. Patient data is handled with the highest security standards. No data is stored on the internet or in 3rd party systems.



#### Highlights

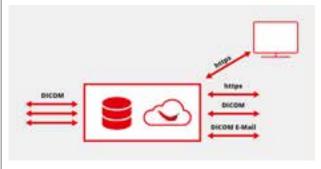
 To connect your referring practices · Efficient and encoded transferral of image data

Secure, user-defined access control

No elaborate VPN neccessary

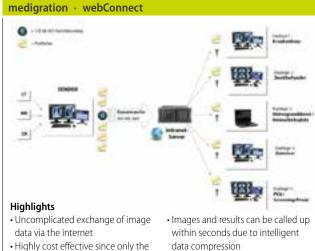
- Fast display of images and findings as PDF or SR
- For PC / MAC: Intuitive, web-based
- tool, to be launched without any installation via any standard browser





#### Highlights

- Vendor-independent protocols
- DICOM, DICOM E-Mail, HTTPS,
- Rule-based autorouting
- Automatic recovery after interruption
- Comprehensive security measures
- Lossy and lossless compression
- Data encryption
- Audit trails
- Diagnostic web-viewer
- Web-based administration Compliant to German StrlSchV
- and DIN 6868-159
- Works with any PACS



actual transferred data is calculated Total security by means of 256 bit AES encryption

No VPN connection necessary

#### **Portal Solutions**



#### Highlights

of patient data

Web-based platform for the exchange of multimedia documents, e.g. diagnoses, lab results, DICOM images

Nexus / Chili · Patient Portal

- Upload and download of DICOM and other images
- · Forwarding to referring doctors



#### Nexus/Chili · Teleradiology Portal

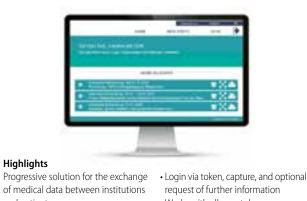


#### Highlights

workflow

Web-based portal that covers the entire teleradiological workflow

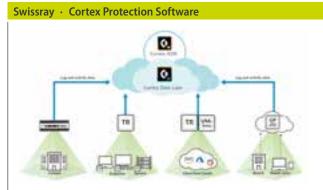
- Electronic request and reporting process • Guided steps throughout the entire
- Integrated quality assurance according to DIN 6868-159
- Transfer of images via DICOM
- Access to all data anywhere anytime
- · Availability of data relevant to
- Complete documentation of all steps
- accounting



and patients

- Digital alternative for physical
- patient CD Protection of data privacy
- Easy integration into RIS
- Works with all smartphones or
- desktop computers; no installation required for patients
- Automatic transfer of images from every PACS

#### Utilities / Add-ons



#### Highlights

Best-in-class malware prevention for X-ray systems:

- Uncover threats with cloud AI and behavioral analytics
- Prevent, detect, investigate and respond to all threats
- Block known and unknown attacks with powerful endpoint protection
- Validated by Swissray
- Unique to the DACH region



#### Highlights

The medical cloud ORCA offers two exciting applications: ORCA Archive and ORCA Share.

ORCA Archive transfers and stores image files from direct sources (e.g. digital X-ray, CT, MRI and ultrasound systems) as well as from Picture Archiving and Communication Systems (PACS). At the same time, ORCA is a platform for sharing data with external partners.

The application ORCA Share facilitates exchanging images and medical findings with staff, colleagues and specialists.

#### Mobile RIS/PACS Viewers

#### Agfa HealthCare · Enterprise Imaging



#### Highlights

By seamlessly creating a comprehensive medical imaging record and providing you with the tools to collaborate, exchange, view and manage images, Agfa HealthCare Enterprise Imaging supports you to build a system that will bring you clinical value all along the care continuum.

#### Mobile RIS/PACS Viewers

Agfa HealthCare · Enterprise Imaging Universal Viewer



#### Highlights

Patient-centric image access from across all specialties in the enterprise, with enhanced viewing, collaboration and sharing, on a single web viewer. XERO Viewer provides secure access to imaging data from different departments and multiple sources, in one view, to anyone who needs it. With the mobile device support, you can truly work on the go, capturing and uploading images wherever you are.

#### Agfa HealthCare · Image Exchange



#### Highlights

Fast, secure, reliable transfer of patient studies between hospitals, with no CDs or DVDs. With unlimited inbound and outbound uploading and downloading of images and a web-based way to share images with patients, referring physicians and other hospitals, Agfa HealthCare Image Exchange solutions provide the enhanced image sharing you need to improve the delivery of care while decreasing costs.

#### Image Information Systems · iQ-4View



#### Highlights

iQ-4View is a ground-breaking diagnostic multimodality zero-footprint viewer, suitable for virtually all browsers and operating systems. It runs on almost any device (desktop computer, tablet PC or smartphone) and requires no installation on the client. iQ-4View allows reading, viewing or reviewing any kind of images, structured reports and Encapsulated PDFs.



#### Highlights

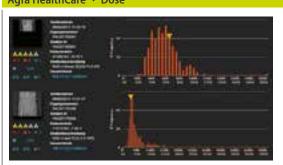
• To connect your referring practices • Efficient and encoded transferral of

medigration · MultiPortal

- image data
- Fast display of images and findings as PDF or SR
- No elaborate VPN neccessary
- For tablets & smartphones: Installation and updates easily via AppStore
- Secure, user-defined access control



### Agfa HealthCare · Dose



#### Highlights

The web-based Dose monitoring platform, integrates directly into existing picture archiving and communication system's (PACS) environment. Collecting the dose and metadata information already there, it can create patient radiation dose analyses at the study, patient, device, modality or institution level. It also provides all the tools you need for root cause analysis, to help you understand and solve potential problems. The Dose monitoring solution gives the tools needed to manage, analyze and balance the organization's radiation dose management.

#### Nexus / Chili · WebViewer<sup>NG</sup>



#### Highlights

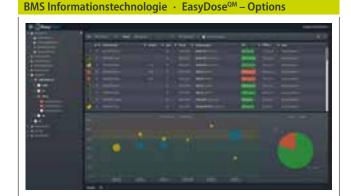
- Mobile image viewer
- Teleradiology
- PACS administration
- Easy integration into any other
- system, such as HIS / RIS / PACS / EPR
- Works without an app store
- Independent of operating system
- (iOS, Android, ...)
- Device independent (Apple, Google, ...)
- No app but HTML5!
- Works with any PACS

#### **Dose Management Systems**

BMS Informationstechnologie · EasyDose<sup>QM</sup>

#### Highlights

EasyDose<sup>QM</sup> liberates care professionals from most time consuming manual tasks: acquisition, documentation, analysis and archiving. It utilizes DICOM, HL7 and integrates seamlessly within existing HIS / RIS and PACS systems. Dose information about individual patients, modalities and departments can be obtained without complicating search mechanisms with a few mouse clicks. EasyDose<sup>QM</sup> has been developed with the end-user in mind.



#### Highlights

Highlights

EasyDose<sup>QM</sup> complementary options:

- · Integration of measuring stations and column scales
- RFID tracking of mobile devices, e.g. C-arms
- GPU based Monte Carlo Simulation
- HIS / RIS / PACS integration

#### Fujifilm · Synapse Dose



#### Highlights

- Nexo [DOSE] supports compliance with imminent European Directive (2013/59/EURATOM)
- Single-server, fully automated system enables enterprise-wide data acquisition
- Multi-modality, vendor-neutral software minimizes installation time and costs
- Customized e-mail alerts help improve control and implement the ALARA\*
   principle
- Global dose registry for study dose comparison
- \*ALARA (as low as reasonably achievable)

#### Highlights

Contrast&Care is a solution dedicated to contrast dose management. It connects to all Guerbet injectors and Hospital Information Systems (RIS, PACS, EMR...) and collects all relevant data about contrast media usage, patient history, and injector activity. Contrast&Care facilitates the traceability of contrast media and provides several tools that help imaging centers optimize contrast media consumption.

Synapse Dose is a comprehensive

system for monitoring and managing

patient radiation exposure across differ-

ent imaging modalities. It is a support

for the optimization of radiological pro-



cedures and acquisition protocols, a tool for supporting clinical audit and it provides a comprehensive patient dosimetric history. General and specific dashboards track key performance indicators (KPI) to measure productivity, to achieve quality assurance and to support quality of care. Synapse Dose is the radiation dose index monitoring system developed by Fujifilm, compliant with the directive 2013/59/EURATOM of the European Union.

# Guerbet - Dose&Care

#### Highlights

Dose&Care is a state of the art radiation dose monitoring solution, which allows documenting patient exams, understanding the reasons for excessive exposure and monitoring activities related to patient exposure. It provides the means to remain compliant with an ever-evolving regulation while improving the workflow and ensuring patient safety.

## Guerbet · Contrast&Care

#### **Dose Management Systems**

#### i-Solutions Health · RadCentre Dose View



#### Highlights

RadCentre Dose View is a stand-alone and RIS-independent dose management system to assess patient exposures due to ionizing radiation. The system is able to meet legal requirements (i.e. EU-Directive EURATOM 2013/59 and related national regulations for radiation protection) by offering consistent standards to increase the quality of radiological examinations.

#### Siemens Healthineers · teamplay Dose



#### Highlights

teamplay Dose\* simplifies radiation dose management for your entire imaging fleet by providing you with easy access to radiation dose data in order to reduce dose and facilitate compliance to dose management requirements. • Simple monitoring and managing of dose values on various levels, ranging

- from all modalities to a single patient
- Find the outliers and understand the root causes to take corrective actions
- Learn from your peers by benchmarking dose values on global and national levels

\* Please check if teamplay is available in your country

#### medigration · Domako



#### Highlights

Domako. Simple software solution for dose management (DM). Collects, classifies and evaluates dose data; graphs them. Efficiently control DM process. Optimize protocols of modalities purposefully. Observes dose guidelines of BfS. Holistic/detailed, be it in terms of individ. protocols, pat. groups or individuals. Fulfils function of an autom. X-ray book. Enables to react proactively to deviations. Web-based on-premises system. Can be integrated into other software systems.

#### Accessories / Complementary Systems

#### Canon · Advanced Edge Enhancement





#### Highlights

Enhanced visibility of catheters, fine structures and bones

- Better visualization of foreign structures in the image
- Enhanced display of fine structures
- Better definition of the structures in
- soft tissue and low dose area's
- Obtain enhanced images suitable for measurement or other applications
- Catheter, small structure and bone settings depending on the specific application
- Improved visibility of bone contours for easier measurement of length and angles



#### Highlights

RadCentre Technician Profile visualizes requested or performed examinations and reports at a glance and supports a fast and modality based workflow.

- · Specific icons show examination status or patient information
- Images of prior examinations via integrated PACS viewer
- Interactive icons to change information or workflow status
- Scanned document files and laboratory results

#### Canon · Scatter Correction

#### Highlights

Excellent image contrast without a grid. Canon's new image processing software Scatter Correction could reduce radiation dose by up to 60 percent on your radiographic examinations.

Where a grid physically reduces scatter

and thereby increases the image contrast, the software mimics this process virtually. The software works by creating a scatter model, which is subsequently subtracted from the image. The result is an image with reduced scatter and increased contrast. The software is available for Canon FPD imaging systems.

# Mammography



Scan time

3.7 s





### Fujifilm · Amulet Innovality Scan angle 15°/40°

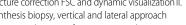
Pixel output 50 μm/100 μm/150 μm





- Unique Fujifilm developed a-Se detector using hexagonal pixels for dynamic readout of different resolutions
- New iterative reconstruction with new level of synthetic 2D image (S-View+) (Harmony) – corrected for low noise
- and better visibility of details, resulting in easy reading • Ergonomic design for user and patients
- Dynamic image processing with advanced options like
- fine structure correction FSC and dynamic visualization II.
- Tomosynthesis biopsy, vertical and lateral approach
- Dual angle tomosynthesis for dose efficient with maximum diagnostic

IMS Giotto – GMM Gr	oup 🔸 Giotto C	lass
<b>Pixel size</b> 85 μm	<b>Scan angle</b> 38.6°	Scan time 13 s
Highlights Giotto Class is an advance three dimensional breast able to perform • Digital mammography e • Breast Tomosynthesis (31 • Synthesized 2D image g dataset • Combo: Tomosynthesis & graphy • Stereotactic biopsy in pro- position • Contrast-Enhanced Spec IMS Giotto is a company c	imaging technolog xaminations (2D) D) enerated from 3D & digital mammo- one or upright tral Mammograph	



- CEDM; energy subtraction for mammography
- performance

<b>Pixel size</b> 83 μm	Scan angle 15°	Scan time
Highlights		
imaging, diagn and Digital Bre- • Continuous Syn method with it Marker technol free images	ography system for conventi ostic imaging, stereotactic b ast Tomosynthesis (DBT) nc-and-Shoot tomosynthesis erative reconstruction and Tr ogy to enable sharp and art ed Clarity Flow touch screer	iopsies : imaging omo- fact



#### Tomosynthesis

Hologic · 3Dimensions

Pixel size

70 um



identifying invasive	
al the finest details hest resolution 3D Mam	imo-
lable. Designed to help y ers with confidence, our	advanced
ative 3D Mammography ng Intelligent 2D our Al- ging deliver exceptional	powered
	al the finest details hest resolution 3D Marr able. Designed to help ers with confidence, our ative 3D Mammography ng Intelligent 2D our Al-

Scan angle

## Advancing the Breast Continuum of Care



The pandemic has presented healthcare systems with new challenges, resulting in backlogs of routine screenings and delayed procedures which threaten the health and wellbeing of patients, as well as the ability of facilities to serve their communities. In order to address these widespread issues, we need to ensure that healthcare professionals are able to operate with precision, confidence and efficiency. Especially now amidst the ongoing pandemic, it's important to assess ground-breaking technologies and understand how interconnected innovations can help enable today's providers to take on tomorrow's challenges.

As a global champion for women's health, Hologic is committed to helping healthcare professionals around the world diagnose and treat their patients with certainty and effectiveness, providing insight-driven solutions that encompass the full clinical continuum of breast health. By addressing the entire patient pathway, our innovations enhance workflow efficiency, reduce facility costs and improve patient outcomes. These innovations include:

#### Streamlining Workflow with Artificial Intelligence

Artificial intelligence is a crucial component for the future of women's healthcare and an effective solution to help address the current backlog issues facing radiologists. The European Commission Initiative on Breast Cancer (EBIC) guidelines on breast cancer screening and diagnosis recently recommended for the first time the use of either digital breast tomosynthesis (DBT) or digital mammography in screening. While the additional breast imaging slices generated by DBT, also known as 3D mammography, can enable better cancer detection, the influx of images can also lengthen the reading process. Hologic's 3DQuorum Imaging Technology, Powered by Genius AI, is designed to help improve mammography efficiency and workflow without compromising image quality, sensitivity, or accuracy. By reconstructing high-resolution 3D data to produce 6 mm "SmartSlices," 3DQuroum reduces the number of 3D images to review by two-thirds and saves radiologists an average of one hour per eight hours of daily image interpretation time.1

# Bringing 3D Imaging to Breast Ultrasound

Ultrasound has become an increasingly important tool for breast cancer diagnosis, enabling clinicians to assess breast lesions and anatomical structures without any radiation exposure. To further enhance the diagnostic accuracy offered by the Super-Sonic Mach 30 and 20 ultrasound systems as well as improve patient outcomes, Hologic introduced 3D ultrasound imaging, allowing breast tissue to be visualized in any scanning plane. The additional details provided may assist clinicians in the workup of difficult lesions, includ-

ing in patients with dense breast tissue.<sup>2</sup> Paired with the system's ShearWave PLUS elastography, 3D imaging may also contribute to more accurate tumour size estimation,<sup>3,4</sup> and clear margin definition in pre-operative settings. Furthermore, the innovation may play a role in monitoring and evaluating breast cancer patients during and after neoadjuvant chemotherapy.<sup>5,6,7</sup>

# Improving Digital Specimen Radiography

Digital specimen radiography is an essential part of breast health care and treatment, helping to diagnose patients as well as ensure proper removal of suspicious lesions. Optimised for today's health-



care environment, Hologic's Faxitron Path+ Specimen Radiography System features a superior, high-resolution imaging detector enabling pathologists to image a wide range of specimens of varying sizes. By combining a larger field of view with intuitive, easy-to-use software, the system provides pathologists with accurate results in an efficient manner. This immediate access to high-resolution imaging and reporting helps reduce turnaround time and enables guicker patient diagnoses, as well as treatment.

Our mission to advance the Breast Continuum of Care is built upon an unwavering commitment to providers and their patients. Throughout the challenges and uncertainty of the past year, the healthcare field has been incredibly resilient, inventive and supportive. By continuing to collaborate as we navigate the ongoing pandemic, we can help ensure that healthcare professionals are equipped with the necessary tools and knowledge to provide expert care across the entire patient experience. By working together, we can deliver the ultimate solution.

www.hologic.com

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<sup>1</sup>Report: CSR-00116
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<sup>&</sup>lt;sup>2</sup>Berg WA, Blume JD, Cormack JB, et al. Combined screening with ultrasound and mammography vs. mammography alone in women at elevated risk of breast. JAMA, 2008;299(18):2151-2163 cancer [published correction appears in JAMA, 2010;303(15):1482]

<sup>3</sup> Farrokh A, Maass N, Treu L, et al. Accuracy of tumor size measurement: Comparison of B-mode ultrasound, strain elastography, and 2D and 3D shear wave elastography with histopathological lesion size. Acta Radiol., 2018;60(4):451-458

<sup>4</sup> Mullen R, J M Thompson, O Moussa, et al. Shear-wave elastography contributes to accurate tumour size estimation when assessing small breast cancers. Clin Radiol., 2014;69(12):1259-63

<sup>5</sup> Athanasiou A, Latorre-Ossa H, Criton A, et al. Feasibility of Imaging and Treatment Monitoring of Breast Lesions with Three-Dimensional Shear Wave Elastography. Ultraschall Med. 2015 Mar 5.

<sup>6</sup> Ma Y, Zhang S, Li J et al. Comparison of strain and shear-wave ultrasonic elastography in predicting the pathological response to neoadjuvant chemotherapy in breast cancers. Eur Radiol. 2017;27(6):2282-2291

<sup>7</sup> Lee SH, Chang JM, Han W, et al. Shear-Wave Elastography for the Detection of Residual Breast Cancer After Neoadjuvant Chemotherapy. Ann Surg Oncol., 2015;22 Suppl 3:S376-84

Tomosynthesis		
Siemens Healthinee	rs • 50° Wide-Ar	ngle Tomosynthesis
<b>Pixel size</b> 85 μm	Scan angle 50°	<b>Scan time</b> 25 s
Highlights Advance screening and c with high accuracy. 50 ° V synthesis has proven an i detection rate of 41.5 % f with a one-view tomo sc Highest depth resolutio Angle Tomosynthesis Gain a fast overview – w visualization Insight 2D	Vide-Angle Tomo- ncrease in cancer or invasive cancer – an only. n with 50° Wide-	

- 40 % dose reduction as opposed to FFDM as an adjunct to tomosynthesis
- Decrease tomo reading time with our unique, synthetic visualization Insight 3D a unique, rotating 3D display in breast tomosynthesis

# Villa Sistemi Medicali · Melody IIID TS 3.0

<b>Pixel size</b>	Scan angle
85 μm	15°/24°/50°

# Highlights

- Tomosynthesis function with selection of three scan angles: 15°, 24° and 50°
- Available with Amorphous Selenium FPD (standard or fast speed for tomo scan)
- Special anti-scatter grid for tomo
- Dynamic collimator with automatic recognition of compressor paddle
- Dual AEC: PRE in function of effective Breast Density and FAST in function of compressed breast thickness
- Full DICOM Acquisition workstation
- on-board or in a separated unit

Scan time 2.5 s/4 s/7.7 s

- Ready for tomo-guided biopsy
- Ready to be implemented with
- Dual Energy work modality

  Optional diagnostic workstation
- available with CAD software

IMS Giotto – GMM	A Group · Giotto Cla	ss Smartfinder
<b>Pixel size</b> 85 μm	Detector size $24 \times 30$ cm	Detector type a-Se
	-	G
<b>Highlights</b> Giotto Class is a pate	nted breast	- 21

# Giotto Class is a patented breast tomosynthesis system offering a multitude of diagnostic and interventional solutions, including Stereotactic biopsy in prone or upright position using the specific prone table accessory. • High precision tomo guided biospy

- Combination of traditional stereo technique and tomo biopsy
- Integration with accessory for realtime acquisition of biopsy cores imaging



• The compact design allow the operator to use the system in the same room for both diagnostic and interventional procedures IMS Giotto is a company of GMM Group

# Siemens Healthineers · Mammomat Revelation Pixel size 85 μm Scan angle 50° Scan time 25 s Highlights State-of-the-art digital mammography system for screening and diagnostics Make anatomical details clearly visible with our unique 50° Wide-Angle – in Tomosynthesis and Biopsy Image: Colspan="2">Colspan="2"Cols

- Automated breast density measurement right at the acquisition workstation allows for instant risk stratification
- InSpect our integrated specimen scanner facilitates the immediate control of the
- biopsy directly at the system • Get additional diagnostic information fast with
- Titanium Contrast Enhanced Mammography • Unlock the potential of your X-ray department
- Unlock the potential of your X-ray departmen with Fleet Level Benefits

# Digital Mammography

# IMS Giotto – GMM Group · Giotto Class 40000

Pixel size     Detector size     Detector type       85 μm     24 × 30 cm     a-Se   Highlights The system is designed to drastically improve the screening and diagnostic throughput thanks to an high	200
Highlights The system is designed to drastically improve the screening and diagnostic throughput thanks to an high	20
rotation speed and an improved vertical run speed The gantry is ergonomically designed to give patients a natural and more relaxed positioning The operating and interventional modalities include: • Digital mammography examinations (2D) • Breast Tomosynthesis (3D) • Synthesized 2D image generated from 3D dataset • Combo: Tomosynthesis & digital mammography • High precision tomo guided or stereotactic biopsy	

• Contrast-Enhanced Spectral Mammography (CESM) IMS Giotto is a company of GMM Group

# Planmed Oy · Clarity 2D Pixel size Detector size Detector type 83 µm 24×30 cm a-Si Highlights Intelligent Planmed Clarity Flow dual touch screen user interface that adapts to different imaging modes · Image post processing that can be tailored to radiologist preferences · Side access for optimal patient positioning and user ergonomics Integrated MaxView breast positioning system for maximal tissue visibility

- Easy field upgrade to Planmed Clarity 3D
- digital breast tomosynthesis

# **Digital Mammography**



<b>Pixel size</b> 85 μm	<b>Detector size</b> 23.9 × 30.5 cm	Detector type a-Si/Csl or a-Se
55 µm	23.57(50.5 cm	
	sion technology:	
conversion det		and the second sec
	mation and filtration	i di seconda
according to the paddle	e installed compression	21 I. J. 1993
Iso-centric C-ar	m	
Fully motorized	l movement	- Aller
/		
Automatic expe	osure control (AEC) nsole with 3 MP B/W • Full f	field digital stereotactic biopsy

- monitor and transparent anti-X protective barrier
- Upgradable to 3D Stereotactic biopsy device

Villa Sistemi Medicali	· Melody IIID	3.0	
<b>Pixel size</b> 85 μm	Detector size 24×30 cm	Detector typ a-Se or a	
Highlights • High performance X-ray with wide kV range (20- • lsocentric ±180° rotation with vertical and rotation movements • Dual AEC PDE in function	49 kV) (C-arm n motorized	- Re-	

- Dual AEC: PRE in function of effective Breast Density and FAST in function • Upgradable to TS version with tomo of compressed breast thickness
- Ready for optional stereotactic biopsy
- Full DICOM Acquisition workstation
- on-board or in a separated unit
- Ready to be implemented
- with Dual Energy work modality
- Optional diagnostic workstation available with CAD software

<b>Pixel size</b> 83 μm	Detector size 23 × 30 cm	Detector type Csl
Highlights Premium mammography everyday screening and d Help your patients to relu- Light option Stereotactic biopsy option procedures New generation Csl detechigher spatial resolution Refined workflow to per at the click of a button	agnostics ax with the Mood- on for fast seamless ector technology for at low dose	
<ul> <li>Personalized OpComp at Focus on total cost of ow operating costs and serv</li> <li>Unlock the potential of y ment with Fleet Level Be</li> </ul>	vnership including ice our X-ray depart-	

Siemens Healthineers · Mammomat Fusion

Villa Sistemi Medicali · Melody IIID C 3.0			
<b>Pixel size</b> 85 μm	Detector size 24×30 cm	Detector type a-Se or a-Si	
Highlights • High performance integr generator with wide kV r (20 – 35 kV) and fine adju (0.5 kV step) • Isocentric ±180° rotating with vertical and rotatior motorized movements • Available with Amorpho FPD • Dual AEC: PRE in function	ange ustment (C-arm n (optional) us Selenium	<ul> <li>Double touchscreen LCD display to control main parameters</li> <li>Compact unit with full DICOM acqui-</li> </ul>	
Breast Density and FAST of compressed breast thi		sition workstation on-board • Optional diagnostic workstation	

# **Biopsy Units**

# Hologic + Favitron Trident HD Specimen Radio

	ident no specimen na	ulography System
Pixel size	Detector size	Detector type
70 µm	16×18cm	a-Se

# Highlights

The Faxitron Trident HD system elevates specimen imaging. It's the latest device to use our amorphous selenium, direct-capture technology to eliminate the image degrading effects of light diffusion and improve image conspicuity. The system's Automatic Exposure Control (AEC) is optimized for breast excisions and core biopsies, and its advanced algorithm was created specifically for breast specimen radiography processing. Faxitron Trident HD turns images into answers - on the spot.

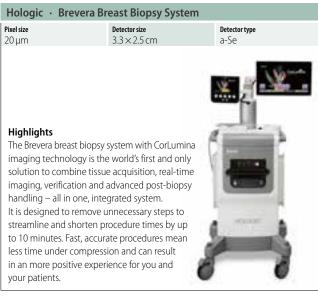


# **Biopsy Units**

Hologic · Faxitron	Core Specimen Radio	graphy System
<b>Pixel size</b> 48 μm	<b>Detector size</b> 5 × 10 cm	<b>Detector type</b> a-Se
Highlights	ann Badiography System bo	
I ne Faxitron Core Specin	nen Radiography System he	ips

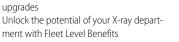
to minimise delays by providing high resolution images without

interrupting the mammography workflow. Within seconds this self-contained, tabletop unit provides high-resolution imaging for immediate core sample verification in the biopsy room. With one touch of a button, a successful biopsy procedure is confirmed. The Faxitron Core system is designed for efficiency.



# Film-Screen Mammography

# Siemens Healthineers · Mammomat Select **Power** 23 – 35 kV Anode Filter Mo/Mo or Mo/Rh Mo Highlights An analogue system that is easy to use, provides images at the right dose and is cost-effective to offer women the standard of care they need Easy touch screen control for streamlined workflow • Easy to dose right with AEC control · Easy to invest with flexible service and upgrades Unlock the potential of your X-ray depart-





# Villa Sistemi Medicali · Melody III 3.0

Anode

Мо

**Power** 20 – 35 kV

# Highlights

- High performance integrated X-ray generator with wide kV range and fine adjustment (0.5 kV step)
- AEC with selection of exposure parameters in function of effective
- breast density Available with 18×24/24×30 cm
- bucky or potter accepting both cassette sizes
- Isocentric ± 180° rotating C-arm with vertical and rotation (optional) motorized movements



 Ready for optional stereotactic biopsy Double touchscreen LCD display to control main parameters Upgradable to digital version

IMS Giotto – GMM Group · Giotto Flexitable Detector type a-Se

Detector type

a-Se

Highlights

Pixel size

85 µm

Highlights

Pixel size

70 µm

Flexitable is an accessory which, in combination with the Giotto CLASS system and the Smartfinder biopsy kit, enables interventional prone biopsy procedures · High manoeuvrability, thanks to its reduced weight,

Detector size

24 × 30 cm

Hologic · Affirm Prone Breast Biopsy System

Detector size

14.3×11.7 cm

The first dedicated prone stereotactic biopsy system with 2D/3D imaging

capabilities. The Affirm system provides exceptional 2D imaging capability and is

upgradeable to 3D imaging. This next-generation solution elevates prone biopsy

proven faster and more streamlined workflow, and total 360 access to the breast.

performance to a level never before possible by delivering superior imaging, a

- the handle and the special wheels • Excellent ergonomics for the patient thanks to the
- possibility of adapting the position of the breast and inclining or raising the front end of the table to compensate for bending and come into closer contact with the chest
- · Excellent ergonomics for the operator: thanks to the large vertical travel, which makes it possible to work either standing or sitting, and the absence of connecting cables when the table is powered by the battery IMS Giotto is a company of GMM Group



# Accessories / Complementary Systems

# Hologic · LOCalizer wire-free guidance system

# Highlights

The LOCalizer wire-free guidance system is designed to guide breast surgeries easily and precisely. Instead of using wires or radioactivity, the LOCalizer™ system marks the lesion with a miniature radio frequency Tag that is tracked with a mobile handheld Reader. The RFID Tag is designed to be implanted into the breast any time prior to surgery. The handheld displays the distance from the Tag in millimeters and the unique ID number, ensuring that this is the intended, marked spot.



- Light and long life battery
- Easy to use and streamlined workflow with Clarius cloud-based technology



- oil to casing thermal Exchange
- Water cooled jacket avoids remote oil circulation
- Compact lightweight structure
- 800 W continuous dissipation for high energy techniques,

PTW · Normi MAM – Digital X-Ray Test Object

high patients throughput

- Two separate focal tracks, small focus on 10° and large focus on 16°,
- Reduced thermal stress on the
- bearings improves tube life duration
- Severe tests during conditioning assure best performances
  Compact light weight structure

# Highlights

- Checks all relevant parameters of digital mammographic X-ray installations
- Fully complies with DIN 6868-162 and DIN 6868-14

Modularly composed test object
Incl. different absorbers and test elements

# Varex Imaging $\,\cdot\,$ B-121 – Mammography Housing



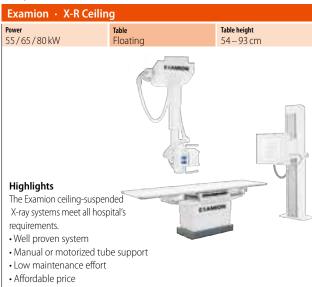
# Highlights

The B-121 is an air cooled mammography housing that fits a standard threeinch X-ray tube insert meant for digital and tomography applications. The housing has two shroud configurations; with and without quiet D/C fans. The B-121 offers 300 watts of continuous heat dissipation with fans, which is approximately 200% greater than standard mammography housings.

# R/F Film-Screen

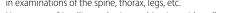


# Bucky







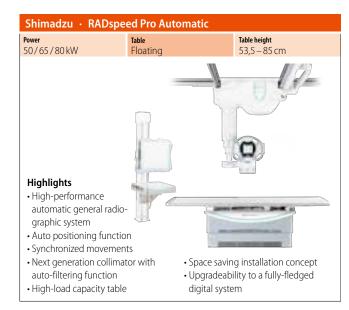


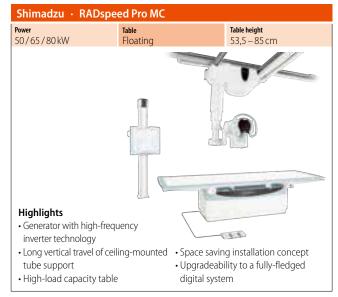
• Utmost user-friendliness also in combination with wall stands.



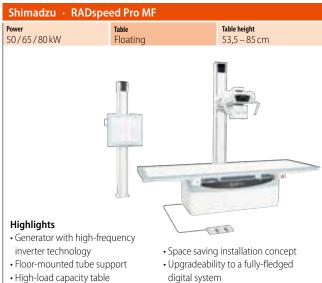
Highlights

Stable and durable metal construction developed and made in Germany. Floating table top, height adjustment, electrical brakes and rotating/swiveling tube arm. Basic X-ray system suitable with all kind detectors (CR, DR).



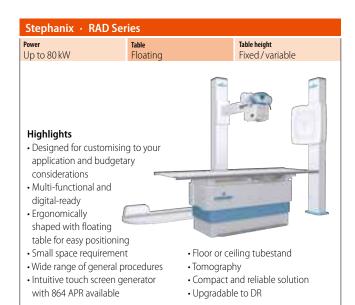


# Bucky





• Upgradeability to a fully-fledged digital system





# Fluoroscopy





# Fluoroscopy

Villa Sistemi Medical	i • Apollo E	EZ 4.0
<b>Power</b> 50/65/80 kW	<b>II format</b> 9"/12"	<b>CCD-matrix</b> 1 k × 1 k
Highlights • Compact and cost-effect system for all the needs radiographic and R/F in • Up to 180 cm Source to Distance	of naging	
Oblique projections at ta edges and electronic tou New touch screen contr with integrated intercon smart-touch joysticks	mography ol console	<ul> <li>Easy patient positioning system through integrated camera</li> <li>Possibility to perform stitching exam with portable wireless detector</li> </ul>

# Examion · X-R Mobile 320 Power 32 kW Motorized Operation no no Highlights The X-R Mobile 320 is a robust X-ray system that meets all requirements of hospitals. • Easy maneuvering and positioning Rotating colum (optional) • Width: 61.8 cm • Weight: 170 kg Compact Affordable price

# Mobile X-ray

<b>Power</b> 4 kW	Operation Mains	Motorized No
		750
Highlights		100
System concept	: Portable radiography syste	m
Compact and p	owerful design	THE
Convenient and	intuitive operation	110000.
• 110 ~ 240 VAC	(Free voltage) input	12.84
• 40 ~120 kV, 10~		1 March 1
<ul> <li>Includes manua</li> </ul>	Il collimator	- Andrewson
· ·	ol – Main body, control conso	
	lication (USB interface & Blue	
	d APR data and user-progran	
	ble mobile stand with exterr	nal console
	erface, with bluetooth	
or DR interface	options	



- FDR Xair can provide a portable solution and a high-mobility workflow even in unconventional medical scenes.
- Excellent portability allowing greater freedom for imaging in patients home and other remote places
- Quick set up for use provides an efficient workflow
- Highly durable LED light source

Intermedical · Compact			
Power 32 kW	<b>Operation</b> Mains		Motorized No
Highlights Mobile system used for dia X-ray examinations. It allov X-ray on CR or film by setti suitable radiological data a interested anatomic area • High handiness allows ar	vs to perform ng the most according to the		
ing of the unit close to ar bed with precise movem	· ·	Cassette ho for five case	older (format 35 × 43 cm)
to the rotation of the colu			ntrol device (ontional)

- to the rotation of the column:  $\pm$  90°
- Storage of 36 exams (APR) Radiographic technique at two points

# Remote control device (optional)

- Possibility to upgrade from analogue
- to digital version



# Mobile X-ray







to ideally support the daily routine

Operation from both battery and mains power and motor assisted traveling

Stephanix · Movix	Series		
<b>Power</b> 20/ 32/40/50 kW	Operation Battery/Mains		Motorized Yes
			T
			1
			~
Highlights		10.00	
<ul> <li>Cost effective solution</li> <li>Compactness ensures</li> </ul>	asy bandling	1000	10000
User-friendly interface v	, ,		
mizable anatomical pro		1	
• Wide range of procedu	res	400	
X-ray tube with rotating	g anode		
Thin dual focal spots		100	0
High heat capacity			- ( )
<ul> <li>Short exposure time</li> <li>mAs Range: Up to 500</li> </ul>	mΛc	1	Carl Carl
<ul> <li>KV Range: Up to 150 kV</li> </ul>		1	-

SternMed · Xenox M80			
<b>Power</b> 15/30 kW	<b>Operation</b> Mains	Motorized No	
Highlights • Rotating anode with (optional 10,000 rpm • 17 × 17" Rad field • Storage for max. six of • Touch screen 10.4" T • Collimator with whit fieldpositioning and • Big rear wheels Ø 25 • Manual driven • Dead-Man brake sys • kV Range: 125 kV • mAs Range: 0.1 to 12	n) cassettes FT display e light LED pediatric filter cm tem		

# Villa Sistemi Medicali · Visitor T30M

Power 32 kW	<b>Operation</b> Battery		Motorized Yes
			2
Highlights • Motorized mobile unit, b powered • Exposures are possible w connecting the unit to ar power supply • Compact structure and fi positioning	vithout n external		
<ul> <li>± 320° rotating column v scopic arm</li> <li>Fine positioning adjustm tube-head controls</li> </ul>		<ul> <li>Frontal burr function</li> <li>kV Range: 4</li> <li>mAs Range:</li> </ul>	

# Mobile X-ray



Villa Sistemi Medicali · Visitor T30C **Operation** Mains Motorized Power 32 kW No Highlights Mobile unit designed for intensive care units as well as orthopedics, pediatric or surgery departments Compact and lightweight design for a high maneuverability of the unit High performance generator and double focal spot (0.8/1.3 mm) tubehead • kV Range: 40 – 125 APR anatomic mode User friendly control panel • mAs Range: 0.1 - 220



# Accessories / Complementary Systems



# Highlights

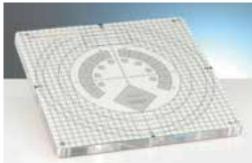
- · A new compact lightweight housing, specifically designed for mobile
- equipment. • A low weight, less than 8.5 kg,
- length, allows significant reductions in the equipment supporting structures. A range of tube inserts up to 54 kW peak radiographic power at high rotation speed is available for this unit.
- combined with compact dimensions,
  - Roesys · X Mobil Q Mobile table for U- or C-arm X-ray



# Highlights

Mobile X-ray table with single sided floating carbon table top. Different models available with tilting and height adjustment by battery operation without disturbing cables. Can be completed with the necessary accessories.

PTW · Normi RAD / FLU – X-Ray Test Object



# Highlights

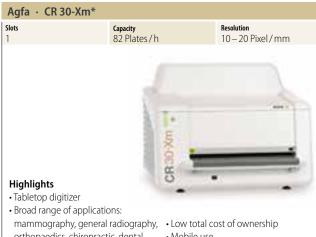
- · Checks all relevant parameters of analogue and digital fluoroscopic and radiographic X-ray units
- Suitable for routine quality checks on over/under couch tubes and C arms
- Includes an attenuation plate for patient simulation
- Complies with DIN 6868-4 and 6868-150
- · Available with the outer format of 300 × 300 mm or 200 × 200 mm

# R/F Digital





# CR



- mammography, general radiography,<br/>orthopaedics, chiropractic, dental<br/>and FLFS• Low total cost of owner<br/>• Mobile use<br/>• Cassette size: From 15<br/>· 35 × 43 cm, incl. mamming
- Horizontal cassette insertion





- Customer-chosen optimal workflow
- Robust, yet easy to install and maintain
- Suited for mobile applications
- Networking capabilities deliver seamless integration
- Cassette size: From  $15 \times 30$  cm to  $35 \times 43$  cm, incl. mammography

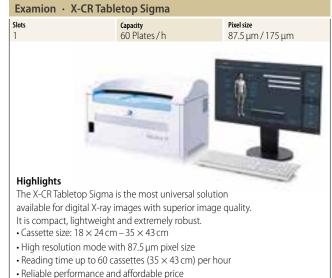


- Fits in small spaces and is suited for mobile applications
- $\bullet$  Highly versatile, compact CR 15-X offers an ideal solution for decentralised
- hospital environments, clinics and private practices.
- Size:  $580 \times 700 \times 471 \text{ mm} (w \times d \times h)$



- Affordable CR solution that makes no compromises in image quality
- For a convenient and fast workflow
- Robust, yet easy to install and maintain
- Fits in small spaces and is suited for mobile applications
- Networking capabilities deliver seamless integration
- Cassette size: 35 × 43 cm





RADBook 2021

# CR





- · Ultra compact: Konica Minolta's smallest and lightest CR reader
- Environmentally friendly with an energy consumption of max. 100 VA
- Cassette size: From 18 × 24 cm to 35 × 43 cm

# DR

# Agfa · DR 600 (Ceiling Suspended)

Agia Dirooo (ceim	ig suspended)	
<b>Power</b> 40/50/65/80kW	Detector type CsI/GOS	<b>Pixel size</b> <150 μm
Highlights		
<ul> <li>Excellent user-friendly 10 head display with previe</li> <li>Detector Csl technology reduction potential</li> <li>Tilting wallstand bucky w tracking, holders for pati</li> </ul>	w image with dose with vertical	7.6
ence and collimator ligh		uistion station" offers

 "Musica aquistion station" offers comprehensive functionality for integrated workflow

 Automatic versions support DR detectors in the wall stand and table with optional additional integrated CR Digital Tomosynthesis

Slots	Capacity	Pixel size
1	80 Plates / h	175 μm / 87.5 μm / 43.75 μn
		HCHON - P
Highlights • Highy quality mami read function		1
Use with standard c	maintain eader with linear motor te assettes and / or mammoor $18 \times 24$ cm to $35 \times 43$ cm	57



Agfa	•	DR 400 (Floormounted)	

	(maninography compatibility)	
)		

<b>Power</b>	Detector type	<b>Pixel size</b>
40/50/65/80 kW	CsI/GOS	<150 μm
Highlights <ul> <li>Cassette size bucky can r</li> <li>from landscape to portra</li> <li>Build-in Dose Area produced</li> </ul>	ait	gu[i]

meter (optional)

- Scalable, flexible and affordable modality
- Flexible configurations and options for most needs
- Supports CR and DR integration
- Requires limited space (4 × 2 m)
- "Musica processing" provides superior contrast detail and consistent, exam-independent image quality
- "Musica aquistion station" offers comprehensive functionality for integrated workflow

• High-productivity, top-of-the-line,

"Musica processing" provides superior

contrast detail and consistent, exam

direct radiography system with

motorized auto-positioning.

independent image quality

Agfa · DX-D 300		
<b>Power</b> 50/65/80 kW	Detector type CsI/GOS	<b>Pixel size</b> <150 μm
Highlights • Universal modality • Single DR detector • "Musica processing" provides superior con- trast detail and consiste exam-independent ima • "Musica aquistion statio comprehensive function integrated workflow • Integrated software for and positioner interface	ge quality n" offers nality for CR / DR generator • Motori	ete versatility with optional e combination zed positioner nounted





- patient throughput
- Easy manual fine-tuning of the overhead tube
- · High capacity examination table User interface with easy access to
- information



Aceso+ represents the optimum combination of 4th generation auto-positioning technology with ergonomic design. The result is an advanced digital radiographic system that creates an efficient workflow and maximizes patient throughput. Featuring advanced applications like auto-stitching, Aceso+ is the optimal solution to all your imaging needs.



- Motorized manual handling using SmartHandle joystick
- Table: Motorized, carbon fiber,
- floating top with 340° rotation



# yet cost-effective, DR imaging solution to a wide variety of clinical needs. The Aceso can be installed in both the tallest and shortest of rooms. Our unique ceiling wagon provides unsurpassed usable stroke for high ceiling heights while the CUBE solution allows the system to be installed in rooms with ceilings as low as 2,5 m without requiring ceiling support infrastructure.



- Asymmetrical diaphragm, specially designed for Thorax examinations
- Asymmetrical diaphragm, specially designed for morax examin



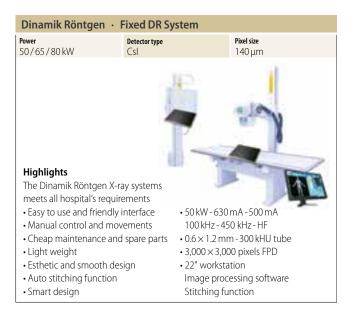


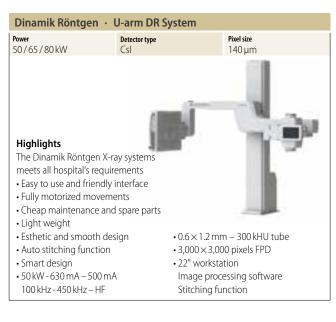


Canon Medical's cost-effective Radrex digital radiography systems provide clinical efficiency to meet your radiographic imaging demands today and into the future. Fitted with Canon's high-quality flat panel detectors and its imaging and patient management software, Radrex provides outstanding versatility, high patient comfort and superior workflow for your facility

# RAD BOOK 2021

Please visit us at healthcare-in-europe.com







- Manual ceiling systems Ceiling-mounted tube support
- Motorized up and down movement (Option)
- Open type 2 column table (Easy to position for wheelchair patient)



# Highlights

- High-frequency inverter type generator
- · Easy operation with floor-mounted tube support (Stand-alone type is optional)
- Open type 2 column table (easy to position for wheelchair patient)
- User convenience with APR



- · Bucky tray following in same direction with tube stand movement
- · Collimator turining on automatically
- User convenience with APR
- Standing knee position (Enable users to take images more convenintly without any hopital tool.



- Intuitive direction movement indicator and user-friendly interface
- Convenient stitching for whole-spine and Long-bone.
- Open type 2 column table (Easy to position for wheelchair patient)



• LCD UI

indicator and user-friendly interface

• Elevating or floating table with high

patient load up to 300 kg

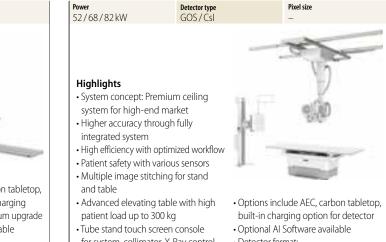
Integrated lock function



- dual speed rotor, built-in charging option for detector & premium upgrade Optional AI Software available
- Detector format:
- 17×17"/17×14" wired/wireless

90

DRgem · Floor Mou	nted System	n (GXR-SD S	eries)
Power 32/40/52/68/82kW	Detector type GOS/Csl		Pixel size
Highlights • System concept: Premium floor mounted Highly customizable dig diagnostic radiography • Auto-synchronization and auto-bucky tracking • Tube stand touch screer system, collimator, X-Ra	l system lital system g function n console for	Options incl dual speed in option for de	floating table ude AEC, carbon tabletop, rotor, built-in charging etector & premium upgrade Software available mat:
X-Ray preview		17×17"/17	$\times$ 14", wired/wireless



Detector type

GOS/Cs

DRgem · Auto Positioning Ceiling System (GXR-SD Series)

for system, collimator, X-Ray control and X-Ray preview

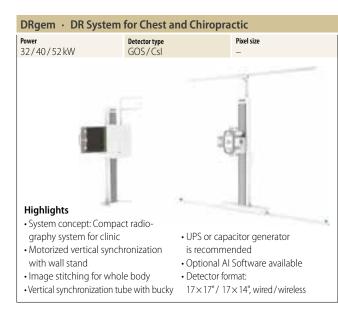
DRgem · Diamond (U-Arm Type)

- Detector format:
- $17 \times 17" / 17 \times 14"$ , wired/wireless

Pixel size



- and smooth movements (Bucky auto tracking, wall stand counter balance)
- Intuitive movement direction indicator
- Integrated lock function Optional AI Software available
- Detector format:
- 17×17", wireless/portable



52/68/82kW

- Highlights System concept: All-in-one
- digital radiography system
- · Fully automatic digital radiography system
- High-resolution removable detectors and grids

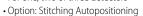
6

- Touch screen controller at system
- Mobile patient table, remote control
- Automatic X-Ray collimation and system positioning Safety sensors / AEC

17×17"/17×14", wired/wireless

- Optional AI Software available
- Detector format:  $17 \times 17$ ", wired / wireless
- DRgem · VXR Power 32/40 kW Detector type Pixel size GOS/Csl Highlights System concept: Analogue / digital veterinary radiography system Capacitor-driven generator available • 1,200 / 1,400 / 1,800 × 700 mm tabletop (2 or 4way movement) • High-quality wireless FPD for DR System Buckle fastener for animals · Easy cleaning with moving rack Touch-screen control console for generator for DR System Detector format:
- · Simple, intuitive user interface







# Examion · X-DR Static Z-Arm or U-Arm Detector type Pixel size Power 55/65/80 kW 100 – 139 µm a-Si/Csl Highlights The U-Arm and Z-Arm systems are compact and space-saving X-ray machines. • Detector size: 17 × 17" • Ideal for small rooms and low ceilings • Easy positioning due to direct coupling of detector and tube Low maintenance effort Affordable price

GMM Group · Calypso F – Multifunctional DR system				
<b>Power</b> 50 kW - 80 kW	Detector type a-Si	<b>Pixel size</b> 139 μm – 148 μm		
Highlights • Floor fixed system with a • User-friendly solution fo • Adjustable height exami- nation table floating in th directions • X-ray tube column stand rails combined with exai table and wall stand • Column stand rotation a axis for an easy and safe • Advanced digital system • Detector size: 35 × 43 cm	r direct digital radiolog - ne four d sliding on mination round its vertical execution of lateral pr n for image acquisition	ojections		

# Fujifilm · FDR Smart X

Detector type Csl/GOS 32/40/52/68/82 kW

Pixel size 150 µm



easier, enhancing radiography workflow and reducing the time the patient is kept in the X-ray room. • mAs Range: 0.1 – 500 mAs • Timer Range: 0.001 to 10 sec

# Highlights

• Fujifilm's outstanding Console Advance acquisition workstation and generator control console integrated into a

single PC, allowing full streamlined operation in a single GUI.

· Synchronization between the movement of the X-ray tube and radiography stand/table makes positioning

# GMM Group · Calypso – Multifunctional DR system

<b>Power</b> 50 kW – 80 kW	<b>Detector type</b> a-Si	<b>Pixel size</b> 139 μm – 148 μm
Highlights		12 8.0
Ceiling suspended-doub     system	ole detector	8
• Enhanced Direct digital Trauma, ER, routine and examinations	57	
Fully automatic, preset for or WiFi detectors		* 22. ×
Adjustable height exami for easy and safe patient	positioning.	Contract of the local division of the local
<ul> <li>Exclusive interlocking te ensuring automatic align the X-ray source to the c</li> </ul>	nment of	<ul> <li>Advanced digital system with optional stitching</li> </ul>
movement		Table: Adjustable height



H D BOOK 2021

healthcare-in-europe.com

Please visit us at

Power	Detector type	Pixel size
65 / 80 kW	Csl	125 µm
for all radiograph • Optimized for h throughput • Widely larger ta	igh volume patient bletop and 4-ways to avoid patient different preset	Powerd by
Smart auto trac	king, available also for ns with the table pine and lower	<ul> <li>Remote control for motorized movements</li> <li>Integrated with Canon detectors</li> <li>Canon NE acquisition software with</li> </ul>



A highly integrated system ensuring high quality diagnostic results in traumatology, emergency, routine and specialized examinations.

- Fully automatic image stitching • Generator power up to 80 kW
- DELUXE processing provides
- outstanding image quality
- · Fast and efficient workflow
- · Easy APP auto-positioning
- · Detector tracking in all directions Full DICOM

# Konica Minolta · AeroDR X90 Pixel size Power 65 – 80 kW Detector type 100 µm Highlights Premium digital X-ray system • Auto-positioning, auto-tracking and auto-stitching Soft handling of OTC with a light touch on table and wall stand for smart and Best image quality, low dose - Detector size: 14 $\times$ 17" / 17 $\times$ 17" / easy daily workflow Interactive tube head display $10 \times 12''$ · Excellent workflow in combination Intuitive and user friendly AeroNAV with AeroDR detector console

# Konica Minolta · AeroDR X60

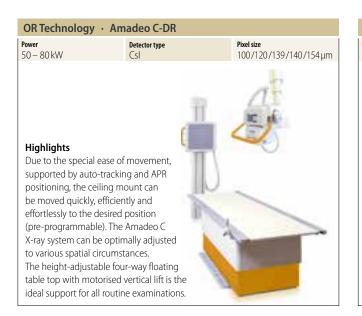


- Best image quality, low dose
- Detector size: 14 × 17" / 17 × 17" / 10 × 12"



- · Integrated generator design to save installation space
- Multiple power choices:
- 30 kW, 50 kW, 65 kW

:	<ul> <li>Detector: Csl material, high DQE</li> <li>Detector size:14 × 17" and 17 × 17"</li> <li>Connection: Wired &amp; wireless detectors</li> </ul>





# OR Technology · Amadeo R-DR motorised Pixel size Detector type



# Highlights

The Amadeo R-DR is a universal X-ray system with bucky table and wall stand. The compact design of Amadeo R-DR allows installation in tight spaces. Simple operation and handling ensure fast training of the X-ray staff. The X-ray source and the bucky cabinet of the wall stand are designed so that they can be folded down to the floor. The large floating table top has a high load carrying capacity. As an option, a shorter table can be used in tight spaces.

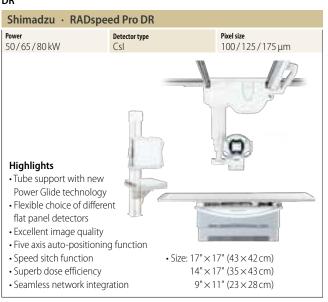
OR Technology · Amadeo S-DR motorised		
<b>Power</b> 50 – 80 kW	Detector type	<b>Pixel size</b> 100/139/140/154 μm
Highlights Due to its compact desig minimum ceiling height the motorised U-arm X-ra especially designed for sr very flexible and partly m tioning of the stand allow of images to be taken. All and operating procedure 10" touch display. Both, ti can be rotated and thus a	of only 2.40 m, ay system is nall rooms. The iotorised posi- is a wide range l important settir s are made on th he bucky tray an	he integrated
positions can be pre-defi	ned on the 60 av	vailable program positions.

# Roesys · X Twin – Robotic X-ray DR system with auto tracking Pixel size Detector type **Power** 50 - 80 kW sl/43×43 cm $100\,\mu m - 143\,\mu m$

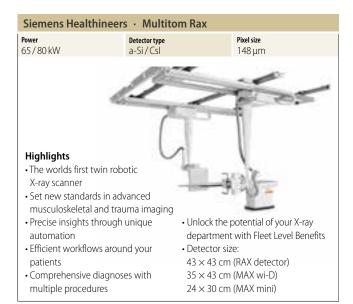


# Highlights

Easy installation on the floor, unique two column design for lateral examination on the free floating carbon table top, six axis motorized movement, options for stitching, bed exams and dynamic imaging.











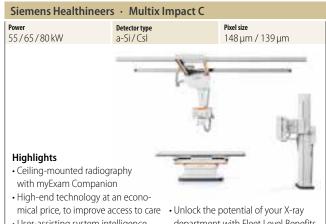
radiology ahead





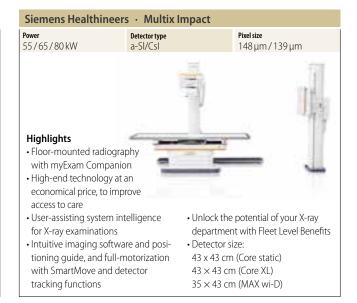






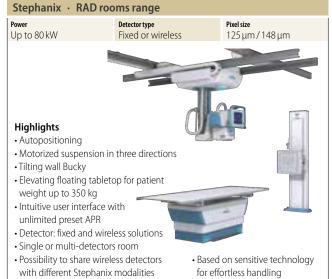
- User-assisting system intelligence for X-ray examinations
- · Intuitive imaging software and positioning guide, and optional motorization and tracking functions
- department with Fleet Level Benefits Detector size:
- 43 × 43 cm (MAX detector)
- 35 × 43 cm (MAX wi-D)

24 × 30 cm (MAX mini)

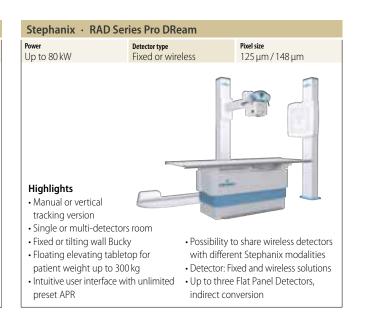




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- tabletop, on wheels

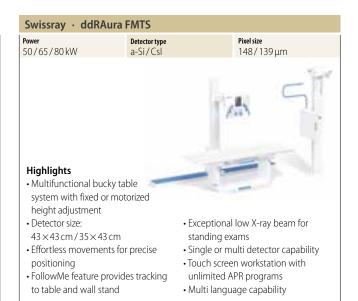
# Swissray · ddRAura U **Power** 50/65/80 kW Pixel size Detector type 148/139µm a-Si/Csl Highlights Automated Positioning System with unlimited APR programs • Detector size: 43 × 43 cm • Image display in 3 seconds • 10.1" tube mounted touchscreen Wireless handheld remote control interface or footswitch Single or dual detector options Small footprint • Off detector / Off center imaging Single focus stitching option

Stephanix · Statif DReam				
<b>Power</b> Up to 80 kW	Detector type Fixed or wireless		<b>Pixel size</b> 125 μm / 148 μm	
Highlights			R	
Multipurpose DR     It can be dedicate     examinations	solution for small budgets ed to chest and extremities wide range of procedures	9	ñ	
Low lootprint for at standing, sitting Manual or motori (SID and vertical r	g or lying patient zed		-	
User-friendly inter	rface			

• Table: Optional carbon or elevating tabletop, on wheels

Swissray · ddRAura S				
<b>Power</b> 50 / 65 / 80 kW	Detector type a-Si / Csl	<b>Pixel size</b> 148 / 139 μm		
Highlights • Multifunctional system f all radiography examina • Detector size: 43 × 43 cm • Motorized height and SIE • Effortless manual rotatio arm, detector and tube • Perfect solution for high chest screening program	tions ) ) adjustment n of straight- throughput	<ul> <li>Touch screen workstation with unlimited APR programs</li> <li>Multi language capability</li> </ul>		
Various generator power incl. battery assist		<ul> <li>Robust design, maintenance friendly</li> <li>Fits into very small examination rooms</li> </ul>		

Swissray · ddRAura OTC/ APS				
Power 50/65/80kW	Detector type a-Si/Csl	<b>Pixel size</b> 148 / 139 μm		
Highlights	0			
<ul> <li>Automated ceiling s DR-System</li> <li>Advanced robotics for system positioning</li> <li>Detector size: 43 × 43</li> </ul>	or automated			
<ul> <li>Tube side 10.1" touc for procedure selecti positioning, generat and image preview</li> <li>Intuitive workflow op interface</li> </ul>	h screen • Cu on, system de or control • De do otimized user • Sin	istomizable fixed or wireless etector option etector sharing option within IRAura products ngle focus stitching feature ulti language capability		



# Villa Sistemi Medicali · Moviplan iC with Floor-mounted Column

Pixel size 100 µm / 143 µm

Detector type

a-Si/Cs

**Power** 50/65/80 kW

# RHDBOOK 2021

# Please visit us at healthcare-in-europe.com

Please	visit us at Ithcare-in-e		Highlights • Innovative design with no unsightly • Anti-collision syste reduced thickness • Table commands • distinctive "light b • Touch screen inter on tube-head for i • No patient limitati weight capacity	m and rails vith arrier" face integrated mmediate inputs on thanks to high	<ul> <li>Electronic tomography with free selection of angle</li> <li>Available with stitching, autopositioning, dual energy functions</li> <li>Detector size: 35×43 cm/43×43 cm</li> </ul>
Villa Sistemi Me	dicali • Moviplan iC	with Ceiling Suspension	Villa Sistemi Me	dicali · Armonic	us
<b>Power</b> 50/65/80 kW	Detector type a-Si / Csl	<b>Pixel size</b> 100 μm / 143 μm	<b>Power</b> 50/65/80 kW	Detector type a-Si/Csl	Pixel size 143 μm
		J. D	Highlights		

- Cost-effective DR U-arm system for extended use, including general
- radiographic and orthopedic studies Easy patient positioning via APR
- functions
- Auto-positioning capabilities according to RIS procedure codes Touch screen control panel, secon-
- dary keyboard and infrared remote control as standard
- Variable source to image distance up to 180 cm



 Touch screen interface integrated on tube-head Tiliting chest stand with special horizontal positioning for exams

on mobile stretchers · Rapid and precise system positioning thanks to full auto-tracking and autopositioning

· High-end solution allowing great

application flexibility and high

production capacity

· Available with stitching and dual energy functions • Detector size: 35×43 cm/43×43 cm

Highlights

# Portable DR



Portable case solutions for emergency X-ray. All functions for acquisition, diagnosis and archiving on a single mobile PC.

OR Technology · Leonardo DR nano

Detector type

- Wireless digital X-ray
- Excellent image quality
- Patient administration with mini-PACS
  Radiological viewer
  Synchronization with stationary
- image archives (optonal)

Pixel size

100/139/154 µm

- Detector size:  $14 \times 17^{\circ}$
- Pixel size: 100 150 µm



Villa Sistemi Medicali · ArtPix EZ2GO Pixel size Detector type 35×43 cm 148 µm a-Si/Cs Highlights Plug-and-play solution for immediate upgrade to digital radiography Lightweight and portable acquisition system based on Wi-Fi flat panel detector and tablet • Extreme flexibility and ease of use thanks to wireless connections · Multi-use solution for shared use with general radiographic systems and mobile units

 Powerful acquisition software complete with post-processing tools and DICOM functions



# Highlights

Size  $14 \times 17"$ 

Just sling the lightweight Leonardo DR nano backpack system over your shoulder

and head off to your next X-ray examination!

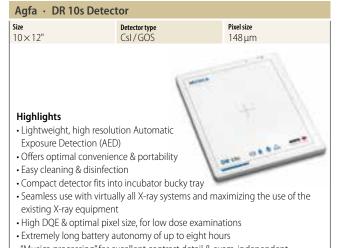
The Leonardo consists of only two components: a wireless X-ray detector and a laptop. The system is one of the lightest portable X-ray solutions worldwide. The X-ray unit and detector have a wireless connection to the acquisition and diagnosis software on the laptop.

# **DR Detectors**



# RADBook 2021

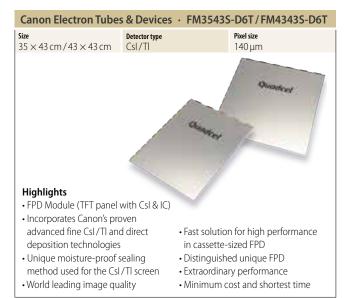




- •"Musica processing" for excellent contrast detail & exam-independent, consistent image quality
- Size: 251.0 × 314.5 mm (10 × 12 inch) (effective area)







# Canon Electron Tubes & Devices · FDX2121F Size 21 × 21 cm Detector type Csl /Tl Pixel size 205 µm Pixel size 205 µm Highlights • Dynamic FPD for mobile C-Arm • Our proven advanced fine Csl /Tl and direct deposition technologies provide high DQE and better resolution • Unique moisture-proof sealing method provides an extremely reliable Csl /Tl screen that is protected from degradation

• High speed & low-noise ROIC prvide low-noise and real time image

# Canon Electron Tubes & Devices · FDXA3543RP



- Standard cassette size
- Prompt display of preview / full images and the short cycle time enable fast image acquisition Compact and lightweight for easy
- DC power input type is selectable

# Canon · CXDI Control Software NE

# Highlights

CXDI control software NE is made exclusively for use with Canon digital radiography systems. This software helps to optimise workflow and

reduce the procedure steps needed to complete exams

- Instant viewing of high quality images
- Optimised workflow with minimum operation steps
- Interactive GUI for intuitive operation
- · Single and prepacked protocols Emergency study capability



- Suspend exam / reject analysis Automatic forwarding rejected
- images to a designated analysis workstation
- Automatic image stitching included
- Scatter correction software (optional)
- · Advanced edge enhancement software (optional)

Highlights

One shot long-length exams enhance efficiency compared to conventional stitch exams; shorter examination time. lower risk on patient movement, reduced dose and increased image guality.

- · Patient positioning stand with motorised height adjustment for easy positioning
- · Fixed installation or mobile for convenient reallocation
- Large, ergonomic grip rails for
- confident patient positioning



- Optional grid
- · Abiliy to use three existing detectors for cost-effective one shot long-

length imaging Versatile configuration; use either 3×43×42 cm (410 CW) or 3×35×43 cm (710 W)

wireless detectors



· Equipped with on-board memory where 99 images can be stored (in stand-alone-mode)

Pixel size

125 µm

- Canon · CXDI-RF Wireless B1 Pixel size Size Detector type 43 × 42 cm 160 µm Highlights
- True dynamic and static imaging in one detector
- Low weight 3.5 kg
- Wired and wireless
- Water and dustproof IP57
- Optional scatter correction software for static and dynamic imaging Maximum flexibility in a clinical setting
- · Ergonomic design for easy hold,
- handle and position

Detector type

Csl

Canon · CXDI-402C / 702C Wireless

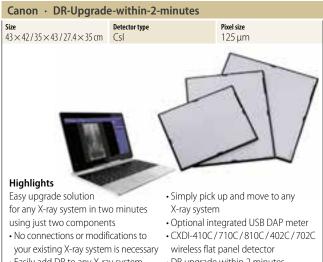
hold, easy handle and easy position

Dust- and water proof (IP57)

Highlights

 $35 \times 43 / 43 \times 42$  cm

- Wireless flat panel detector range Durable and ergonomic shaped
- wireless detectors
- Ergonomic detector design for easy hold, easy handle and easy position Dust- and water proof (IP55)
- Optional docking station for detector check-in, detector battery charging and image transfer
- · Equipped with last image hold for secured image transfer



· Easily add DR to any X-ray system using just two lightweight components

Detector type

a-Si/Cs

Examion · X-DR

14×17″/17×17″

Highlights

Customized retrofit solutions

for stationary, mobile and

portable X-ray equipment.

• Detector: 14 × 17" / 17 × 17"

Excellent image quality

The right detector for any application.

Size

• DR upgrade within 2 minutes. Freedom within reach

Pixel size

· Perfectly matched hardware and

software components

Reliable workflow

100 – 150 µm



· Easy to apply to any X-Ray generator (AED function included)

# Fujifilm · FDR D-EVO series

 Size
 Detector type

 24×30 cm - 125×43 cm
 GOS/Csl

Pixel size 150 µm

 $17 \times 17'' / 17 \times 14''$ , wired/wireless

# Highlights

- Rugged, lightweight, water-resistant digital detectors, available in Csl or GOS and featuring high DQE and low noise at ultra-low doses
- Patented IIS technology, smartswitch AED, built-in image storage, and a Fujifilm exclusive antibacterial
- nano-coating
- FPD sizes



- New ultra-lightweight, FDR D-EVO III featuring an innovative flexible filmbased TFT layer
- Significantly reducing weight and improving durability

# Konica Minolta · AeroDR HD Pixel size Size Detector type 14×17" Csl 100 µm Highlights Portable digital X-ray detector • Pixel size: 100 µm - high definition Able to display micro structures Better visibility of bone trabecular • No "pixel shape" when zooming in • Lightweight for easy handling: 2.6 kg

- Load resistance of 400 kg
- 130 kg bending resistance
- Two second preview
- Waterproof IPX6



# • 24×30 cm to the longview 125×43 cm

# Konica Minolta · AeroDR NS





- Improved cycle time for increased throughput
- Robust: surface load of 300 kg
- AED Hybrid detection technology
- Waterproof IPX6, this makes the detector suitable for more extreme environments
- Konica Minolta's unique capacitor technology: quick charging (30 minutes), no overheating



- · Full image acquisition within four seconds only Charging time of only 13 minutes

Konica Minolta · AeroDR 2S

AeroSync



- For the use with mobile X-ray systems
- Auto-trigger mode (AED function) no need to synchronise with the generator
- · Excellent image quality through an integrated operating program with
- HARMONY image processing
- Detector format: 35 × 43 cm



# Highlights

Works on its own secure network, no WiFi infrastructure required, battery change during operation, option for gridless bed examination, antibacterial surface coating.

OR Technology · Medici DR upgrade				
Size 12 × 10" / 14 × 17" / 17 × 17"	Detector type Csl	<b>Pixel size</b> 100/120/139/140/154 µm		
		and the second s		
		O P		
		120		
Highlights				
Upgrading to digital mad	e easy!			

X-ray detector retrofit for your existing stationary and mobile X-ray system

- Two versions of the system are available:
- DR retrofits with wireless X-ray detector incl. dicomPACS DX-R acquisition and diagnostic software for X-ray images with touch screen
- DR retrofits with tethered X-ray detector incl. dicomPACS DX-R acquisition and diagnostic
- software for X-ray images with touch screen



- Several panel brands and sizes are available Advanced functions: APR, post-processings
- DICOM connectivity
- Shareable solution with other Stephanix modalities





with generator control option

Swissray · ddRAura DRiveKit

# option



- System equipped with battery charger and two batteries as standard
- Enhanced productivity with DICOM functions

# KH DBOOK 2021

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# Villa Sistemi Medicali · VDX 3543TC Pixel size Detector type 35×43 cm 143 µm a-Si/Cs

# Highlights

- Portable lightweight design flat panel fitting into existing
- bucky without modification Increased workflow
- Cost-effective solution, integrating a tether
- cable for both detector powering and image transferring • Easy handling from chest stand to bucky table for upright, in-table, lateral
- and out of bucky exposures
- Enhanced productivity with DICOM functions

# Mobile DR

# Agfa · DR 100s

# Power 32/40 kW

Width 57.6 cm

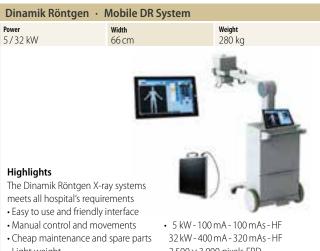
# Highlights

- Customer driven design, amazing usability and freedom of movement
- Smart Imaging, with MUSICA intelligence, for smooth, effective imaging
- Drive and park, with the FreeView collapsible column and height
- adjustable handle.
- Extended range of applications, for greater mobile flexibility



 Motorized: Up to 5 km/h Technology: Wireless – Amorphous Silicon Detector (a-Si) • mAs Range : 70 - 400 mA selectable • kV Range: 40 to 150 kVp

Agfa · DR 100e		
Power 32 kW	Width 61.8 cm	Weight 252 kg
Highlights • Comfortable imaging e patient and operator • Short exposure times a ment of images after ex • Outstanding image qua dose reduction potenti connectivity with PACS imagers • Wireless detector for im flexibility and infection • Your path to direct digitor own pace	nd fast assess- cposure ality and al Seamless , HIS / RIS and uproved control	<ul> <li>Equipped with a powerful generator of up to 32 kW</li> <li>Operation: Plug / Motorized: No</li> </ul>



- Light weight
- Esthetic and smooth design

Smart design

- 2,500 × 3,000 pixels FPD
- 19" workstation
  - Image processing software

Examion · X-DRS Mo	bile Pro 320	
Power 32 kW	Width 57.6 cm	Weight 397 kg
Highlights The X-DR Mobile Pro 320 i powered and motorized X with detector that meets of the hospital. • Comfortable motorized r • Swiveling column • Telescopic arm optional • DICOM connectivity + W • kV Range: 40 – 133 kV • Pixel size: 150 µm / 100 µ	<-ray system all the needs movement /LAN	

Canon · Mobire	ex+	
<b>Power</b> 32/40/50 kW	Width 54 cm	Weight 520 kg
<ul> <li>Telescopic column</li> <li>19 inch multi-Touch</li> <li>Additional 8 inch tu</li> <li>Collimator features a</li> </ul>	sure sensitive steering supported display be-head display an LED bulb, kers for SID accuracy,	
	ntrols on the collimator	<ul> <li>ID card login capability for CXDI Control Software NE</li> <li>LED status indicator light</li> </ul>

(Column rotation)

Remote diagnosis

Remote control

DRgem · Topaz Power 32/40 kW Width Weight Highlights System comcept: Motorized mobile DR system · Enhanced mobility with touch-sensitive handle Optimized image quality with advanced Radmax software Safety bumper and brake with LED Indicator Wide LCD touch screen Storage compartment for detector and other equipment • Wider coverage of ±325° Optional AI software available

- Detector type: GOS / Csl Detector format:
- 17×17" / 17×14", wireless

# Fujifilm · FDR GO Plus Power 32 kW Width Weight 440 kg 56 cm Highlights Multiple easy-to-reach tube positioning releases and front and rear collimation controls for fast, easy collimation and positioning exactly where you need it. Compatible with FDR D-EVO II detectors available in GOS and Csl, in standard $14 \times 17$ " or full field-of-view 17 $\times$ 17" sizes, and a 24 $\times$ 30 cm perfect for neonatal and extremity use. System battery power provides up to four hours of use on a single charge and features emergency reserve mode for additional exposures and travel after low battery warning. • Monitor size: 19"

Р 2

Fujifilm · FDR nano		
<b>Power</b> 2.5 kW	Width 55 cm	Weight 90 kg
Highlights • Ground breaking compa By utilizing the ultrahigh virtual grid technology, r mobile X-ray cart only w • For improved operation a FDR nano has an integra and X-ray controller in or By adopting the use of li	sensitive D-EVO II and esulting in a compact eighing 90 kg. and image viewing the ted console advance ne unit.	M

- By adopting the use of lithium batteries, a single four hour battery charge provides use for
- approximately twelve hours (around 240 exposures). Also plug-in exposure is possible, providing reduced downtime in case of emergency usage.
- mAs Range: 25 35 mAs / kV Range: 40 100 kV





- FDR Xair can provide a portable solution and a high-mobility workflow even in unconventional medical scenes.
- Excellent portability allowing greater freedom for imaging in patients home and other remote places
- Quick set up for use provides an efficient workflow
- Highly durable LED light source

Fujifilm · FDR Xair

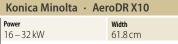


Konica Minolta · AeroDR X30 Power 20/32/40/50 kW Width Weight 67 cm 530 ka Highlights • Fully integrated digital mobile X-ray system Completely motorized and very easy to manoeuvre: can be controlled with one hand • The AeroDR detector can easily be stored and at the same time automatically charged in the bin, even during driving

 100 percent wireless communication for effortless usage at patient's bedside



 Retractable, telescopic column Detector sharing with X-ray rooms



# Highlights

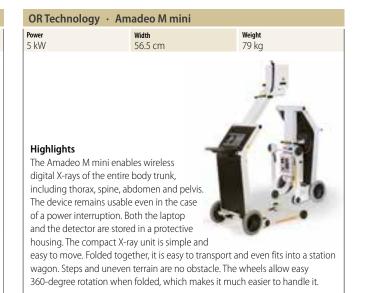
- Fully integrated digital mobile X-ray system
- The AeroDR detector can easily be stored and at the same time automatically charged in the bin



 100 percent wireless communication for effortless usage at patient's bedside · Detector sharing with X-ray rooms

detector

Mindray Medical · MobiEye 700 Mobile DR System				
Power 30 kW / 50 kW	Width 47 cm	Weight 370 kg		
Highlights • Marvelous mobility with intelligent operation • Bionic design manipulat eight high flexible mech joints • Superior power manage	or with anical			
technology • Remote motion control exposure control • 19 inch multiple-touch s		<ul> <li>Lighter and smaller</li> <li>High reliability and compatibility</li> <li>Detector auto-charging</li> </ul>		



Shimadzu · MobileDaRt Evolution MX8 Weight Power 32 kW Width 440 kg 56 cm Highlights Motor-driven, compact system Collapsible column with new Glide View technology · Easy and advanced operating and safety functions • High-sensitive, light-weight, durable and water proof FPD generation • Imaging area: 17 × 17" (43 × 42 cm) 17×14" (43×35 cm) 14 × 11" (35 × 27 cm) Multiple wireless FPD connectivity for maximum efficiency • X-ray images within two seconds



- functions

- mAs Range: 0.32 320

Solutions for tomorro	ow ∙ !M1–	Powered by Canon DR	Siem
<b>Power</b> 20/32/40 kW	Width 58 cm	Weight 324 kg	Power 35 kW
Highlights Setting a new standard in mobile X-ray • Smallest and lightest • Battery operating time u • 10 min charging – 1 hour operation time • 8 years battery warranty		Easy to clean     Ready to use within 10 seconds     Height and reach adjustable drive hande     Remote diagnostic handle     Motorized collapsible column suppor	conn

# Siemens Healthineers · Mobilett Elara Max

Power 35 kW	Footprint 127.8 cm (I) ×	59.8 cm (w)	Weight Approx. 380 kg
Highlights • High-end, fully digital ma X-ray system • Compact system design, maneuverability, flexible with the MAXreach arm a ently high-quality image • Unique antimicrobial coa easy-to-clean design	easy positioning and consist- s	No.	
<ul> <li>Intuitive and fully digital FLC workflow, excellent v connectivity, virtual work cybersecurity package</li> </ul>	vireless	department • Detector: 35	potential of your X-ray with Fleet Level Benefits $5 \times 43$ cm (MAX wi-D) $4 \times 30$ cm (MAX mini)

# • 8

Stephanix · Movix Series DReam					S
Power 20/32/40/50 kW	Width 67 cm		Weight 580 kg		Po 20
Highlights • Compact and light desig • Motorized up to 5 km / h • Independent from mains batteries loading • Telescopic column and a ing wide range of mover easy positioning • X-ray tube with rotating a thin dual focal spots and capacity	rm, offer- nents for anode, high heat				- - - -
Color LCD touch screen 1     Same interface as Stepha rooms, intuitive with unli	nix RAD •	5	olution Ip to 150 kVp : Up to 500 mAs		

Stephanix · Mobile	ange	
<b>Power</b> 20/32/40 kW	Width 54 cm	Weight 520 kg
<ul> <li>Highlights</li> <li>New ultra-compact and design</li> <li>Motorized up to 5.5 km/</li> <li>Telescopic column and a wide range of movemen positioning</li> <li>X-ray tube with rotating up to 150 kV, up to 500 n independent from mains only for batteries loading</li> <li>Colour LCD touch screen</li> <li>Login / identification by b (option)</li> <li>Same interface as Stepha</li> </ul>	n rm, offering ts for easy anode nAs i, I 19" aadge	<ul> <li>Possibility to share detectors with different Stephanix modalities</li> <li>Based on sensitive technology for</li> </ul>



Sternweu · Ke		
Power 32/40 kW	Operation Mains	Motorized Yes
clinical applicatic • Telescopic arm for positions • User-friendly wood 19" touch screen • Advanced APR fu	er suitable for wide ons or different Xray rkstation with inction it panel technology – on ging e processing ries including	Exposure time Range: 0.001 s – 6.3 s kV Range: from 40 to 150 kV mAs Range: 0.1 – 500 mAs 500 GB HDD capacity Intelligent anti-collision design

Swissray · ddRCruze – 7200A

 Easy to maneuver motorized mobile X-ray system, variable speed • Telescopic column and tube arm Convenient and fast image acquisition from the bedside, the OR, ICU or ER room • 500 kHz high-frequency x-ray generator, 50kW  $40-150\mbox{ kV}$  / 0.1 to 640 mAs output power

Width

54 cm

Lightweight WIFI portable detector delivers superb IQ and maximum

Power 50 kW

Highlights

workflow efficiency

Swissray · ddRCruze	e – Vision M	
Power 3.2 kW	Width 66 cm	Weight 70 kg
Highlights • Light-weight, easy to ha with an integrated X-ray • Fast and convenient im- in- and out-door • Detector safety drawer • APR and generator setti	v source arm age acquisition and laptop stand	

- Advanced post-processing software for superb image quality
- $\cdot$  35  $\times$  43 cm FP detector, 139  $\mu$ m, WIFI

# rooms, intuitive with unlimited APR effortless handling SternMed · Xenox M100 Plus

Weight 420 kg

## Mobile DR

Technix · TMB 400/TMB 400 DR			
Power 40 kW	Width 57.6 cm	Weight 435 kg	
Highlights • Battery-motorized unit and bedside positionir • Freeview technology the column • Battery powered X-ray • Two different versions: a • X-ray housing	g nanks to telescopic exposures analogue and digital		
Compact design		Anatomical programs	
Telescopic arm		9" touch screen user interface	
Swiveling column		ull DICOM connectivity+WLAN	
<ul> <li>Integrated generator</li> </ul>	• M	Aultiple detectors can be interfaced	

Power 32 kW	Width 57.6 cm	Weight 412 k	
to maneuver • Front bumper t • Exposures are p the unit to an e	zed system very easy o avoid collision ossible without conne xternal power supply ersions: analoque anc	R.	
digital Compact desig	~		octivity
Compact desig     Swiveling colur		<ul> <li>Full DICOM conn</li> <li>Wide range of po</li> </ul>	,
9	pic column versions	functions	ost processing

Technix · TMB 320 / TMB 320 DR

- functions
- 19" high resolution touch screen monitor ~ Multiple detectors can be interfaced
- Technix · TMS 320 R/TMS 320 RDR Width Weight 240 kg Power 32 kW 70 cm Highlights Light and maneuverable unit • Efficient positioning at patient's bed thanks to the rotating arm Available in two versions: TMS320 RDR (digital) and TMS320 R (analogue) Multiple detectors can be interfaced Available also with fixed arm • High level of detail of X-ray images
  - (TMS320/TMS320 DR)
  - Upgradable to DR on the field
- 19" touch user interface
- Full DICOM connectivity+WLAN

Technix • TMS 300 DRH			
Power 30 kW	Width 62 cm	Weight 220 kg	
Highlights • 30 kW power for perfor examination • Small footprint for ease • Inclines automatically • Motorized crawler tra on stairs • Sturdy wheels for mor or uneven surfaces • High quality DR imag • Multiple detectors can	sy maneuvering the load on stairs cks for easy transpor ving on long distanc es on easy-to-use ta	ies	

Villa Sistemi Medicali · Visitor T40 M-DR Power 32 kW Weight 435 kg

## Highlights

- Compact and lightweight mobile DR unit High performance X-ray generator, tubehead
- with double focal spot (0.8 / 1.3 mm)
- 19" touch screen user interface
- Complete with post-processing tools and DICOM functions
- Detector size: Up to 43 × 43 cm



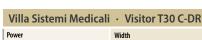
- Full DICOM connectivity
- Detector size: Up to 43 × 43 cm

function

Frontal bumper with anti-collision

## Weight 170 kg 61.8 cm

• Immediate exam review and transmission to the reference hospital

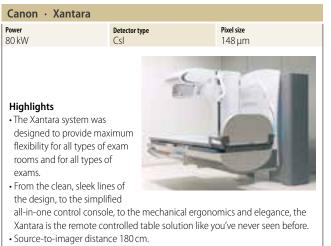


## Mobile DR

Villa Sistemi Medicali · Visitor T30 M-DR				
Power 32 kW	Width 57.6 cm	Weight 412 kg		
Highlights • Motorized DR mobile un • Exposures are possible w the unit to an external pr • ± 320° rotating column v • Fine positioning adjustm head controls • Frontal bumper with anti • 19" LCD touch screen use • Full DICOM connectivity • Detector size: Up to 43 ×	vithout connecting ower supply vith telescopic arm ent through tube- -collision function er interface			

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- · Four-way movement of tabletop.
- Optional second X-ray tube, vertical bucky stand and wireless FPD.
- Detector size: 43 × 43 cm

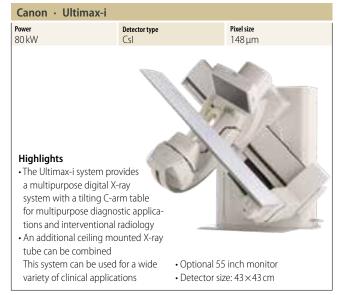
## Villa Sistemi Medicali · Visitor T30 R-DR Width Weight Power 32 kW 69.5 cm 250 kg Highlights Mobile DR unit $\star\pm$ 90° rotating arm for flexible positioning of the unit • High performance X-ray generator, tube-head with double focal spot (0.8 / 1.3 mm) • 19" touch screen user interface Complete with post-processing tools and **DICOM** functions $\bullet$ Detector size: Up to 43 $\times$ 43 cm

## Flatpanel Fluoro

•				
Agfa · DR 800 (Fluoroscopy)*				
<b>Power</b> 50/65/80 kW	Detector type Csl		<b>Pixel size</b> <150 μm	
Highlights • Dynamic 3-in-1 direct raigraphy system offering rimages for fluorscogeneral radiography and exposures. • Single touch, remote-couser-interface and table	eal by, direct ntrolled auto-			
positioning, improving workflow and cations, incl. optional full leg / full maximizing patient comfort spine and tomography				
Wide range of fluoroscopy, general      Includes gold-standard "Musica image     processing" for dynamic images				

radiography and portable appli-\* Not available in Canada

processing" for dynamic images Digital tomosynthesis



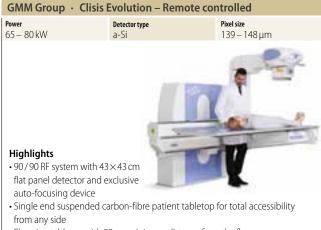




Detector size: 43 × 43 cm







- · Elevating tabletop with 50 cm minimum distance from the floor
- Full-length patient examination in both vertical and horizontal position
- Full integration with optional ceiling suspension and Wi-Fi detector
- Detector size: 43 × 43 cm / 35 × 43 cm / 24 × 30 cm



- with multi-touch screen display
- ER and traumatology, paediatrics); DSA, tomosynthesis, stitching







## Shimadzu · Flexavision F3 Pixel size Detector type Power 50/80 kW 160 µm Highlights Portable dynamic FPD for various studies from head to toe Outstanding digital image quality Great flexibility through smart modular technology Intensive patient care • Siz

• Size: 14×17" (35×43 cm	)	and the second	Bariatric functionality
Siemens Healthineer	s . Lumino	ne Lotue Max	Siemens Healthinee
Power	Detector type	Pixel size	Power
65 / 80 kW	a-Si/Csl	148 µm	65/80 kW
Highlights • Flow in system operation thanks to seamless integration of all components • Flow in clinical versatility range of examinations a patient types • Flow in dose management pre-defined organ progration dose-saving CARE focus processing	ration with a wide nd diverse ent thanks to rams, proven	<ul> <li>Unlock the potential of your X-ray department with Fleet Level Benefits</li> <li>High level of cybersecurity</li> <li>Detector size: 43 × 43 cm (MAX detector ) 35 × 43 cm (MAX wi-D) 24 × 30 cm (MAX mini)</li> </ul>	Highlights • Stronger synergies – with a true 2-in-1 solut radiography and fluoro • Sharper imaging – for f diagnosis with a large Max dynamic detector • Safer use – to protect p technologists with a 44 table height, full patier all sides and SmartTou

## Shimadzu · FLUOROspeed X1 Edition\* Pixel size Detector type Power 80 kW 160 µm CS Highlights • Premium patient-side R/F system with dynamic flat panel detector Imaging deck with Glide Assist technology • FPD size: 17 × 17" (43 × 43 cm) Second tube for multipurpose room Real-time image enhancement processing technologies solution Superb table operability for easy

- Comprehensive dose management operation and patient convenience package
  - \* Product is not available in all countries

## s Healthineers • Luminos dRF Max



Siemens Healthineers · Luminos Agile Max			
Power 65/80 kW	Detector type a-Si/Csl	Pixel size 148 µm	
Highlights • Stronger synergies – with a true 2-in-1 soluti	on		
<ul> <li>Sharper imaging – for fast, confident diagr</li> <li>Safer use –</li> </ul>	nosis	Unlock the potential of your X-ray department with Fleet Level Benefits Ysio Max options:	
to protect patients and Detector size: 43 × 43 cm (MAX detect 35 × 43 cm (MAX wi-D) 24 × 30 cm (MAX mini)	9	<ul> <li>Fully intergrated ceiling-suspended tube with bucky tracking</li> <li>MAX wi-D and MAX mini detectors</li> <li>SmartOrtho: long leg and full spine imaging</li> </ul>	



- 2-in-1 efficiency: flexibility and high utilization saves space and costs
- department with Fleet Level Benefits Detector size: 43 × 43 cm

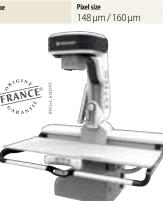




- Detector type Pixel size Power Up to 80 kW a-Si/Csl 148 µm / 160 µm Highlights Unmatched patient coverage Patient weight up to 310 kg FRANCE® Autopositioning regarding each protocol Smart access for secure patient transfer Dose optimization with virtual collimation, additional filtration, video camera... Intuitive user interface Wireless remote
- Secondary console • DSA

Stephanix · D<sup>2</sup>RS

- Stitching
- Tomosynthesis



- Second tubestand and additional detectors
- Motorized: Automatic positioning, collimation, filtration, parameters

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• Wireless remote

Secondary console

### Stephanix · D<sup>2</sup>RS 90/90 – Powered by Canon DR Detector type Pixel size Power Up to 80 kW a-Si/Csl 160 µm Highlights • +90° and -90° tilting Unmatched variable height from 38 to 148 cm Unmatched patient coverage Patient weight up to 310 kg Autopositioning regarding each protocol Motorized: Automatic positioning, collimation, filtration, parameters Smart access for secure patient DSA / stitching / tomosynthesis transfer Dose optimization with virtual collimation, Intuitive user interface additional filtration, video camera ...

detector

- Stephanix · D<sup>2</sup>RS Powered by Canon DR Pixel size Detector type Up to 80 kW a-Si/Csl 160 µm Highlights Unmatched patient coverage Patient weight up to 310 kg Autopositioning regarding each protocol Smart access for secure patient transfer Dose optimization with virtual collimation, additional filtration, video camera... Intuitive user interface Wireless remote Secondary console · Motorized: Automatic positioning, DSA/stitching/tomosynthesis collimation, filtration, parameters · Second tubestand and additional
- detectors

Villa Sistemi Medicali · Apollo EZ DRF 4.0

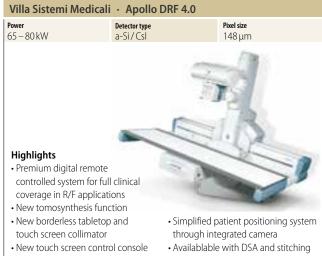
Detector type

a-Si/Cs

 True Dynamic and Static Imaging in one detector

Pixel size

148 µm



- with integrated intercom system and smart-touch joysticks
  - options

True Dynamic and Static Imaging in one

• Detector size: 43 × 43 cm

Villa Sistemi Medicali · Apollo Open DRF 4.0				
<b>Power</b> 65 - 80 kW	Detector type a-Si / Csl	Pixel size 148 µm		
Highlights • Premium digital remote	(			
controlled system with OPEN tabletop, allowing 4-side access to the patie • New tomosynthesis func • Touch screen collimator • New touch screen contro with integrated intercom smart-touch joysticks	tion ol console	<ul> <li>Simplified patient positioning system through integrated camera</li> <li>Available with DSA and stitching options</li> <li>Detector size: 43 × 43 cm</li> </ul>		

## Highlights

65 – 80 kW

- Compact and cost-effective digital system for all the needs of radiographic and R/F imaging
- New tomosynthesis function
- Touch screen collimator
- New touch screen control console with integrated intercom system and smart-touch joysticks
- Simplified patient positioning system through integrated camera Available with DSA and stitching
- options
  - Detector size: 43 × 43 cm

## DXA



- High resolution imaging with ceramic detectors
- A dynamic calibration for greater long-term measurement stability

## Accessories / Complementary Systems



## Highlights

X-ray intelligence at work. Agfa's SmartXR Assistant helps you by lightening your workload and providing image acquisition support. From aligning the panel, to positioning the patient, to setting the precise dose and beyond, SmartXR gives you a helping hand that guides you to greater operational and clinical performance. All while keeping you in control, at every moment.

Canon Electron Tubes & Devices • XRR-3332 X Hiahliahts

## • 3 inch ROTANODE

- 20 percent smaller size / 22 percent lighter weight housing than previous
- model
- High power input: 46 kW / 20 kW (0.1 s)
   Power: 46 kW / 20 kW XRR-3332X is useful for designing
- smaller and excellent mobile system.
- X-ray tube assembly for Mobile systems Adopt large capacity anode target to support multipurpose diagnostic application
  - Size: 1.2/0.6

  - Capacity: 300 kHU (anode heat capacity)
  - 870W (anode heat dissipation)

Canon Electron Tubes & Devices · XRR-6652 X

### Highlights

- 4 inch ROTANODE X-ray tube assembly for RF systems
- 20 percent smaller housing
- than previous model Can be used as a replacement part for 
   High throughput
- similar models
- Size: 0.8 / 0.3 (focal spot)
- Power: 52 kW / 12 kW (input power)
- Capacity: 600 kHU (anode heat capacity) 1,670 W (anode heat dissipation)
- Enhanced heat transfer performance of heat exchanger
  - · High resolution image with small focal spot size

(1,000 W continuous input power)



- Power: 100 kW / 40 kW (max rating)
- Capacity: 400 kHU (anode heat capacity) 1,200 W (anode heat dissipation)



## DRgem · Mobile DR Imaging System for Chest and Chiropractic Power 32/40/52 kW Detector type

 $17 \times 17'' / 17 \times 14''$ , wired / wireless

## Highlights

previous model

for similar models

· Can be used as a replacement part

- System concept: compact radio-
- graphy system for mobile RAD room
- Mobile imaging radiography system
- Motorized vertical synchronization with wall stand
- Image stitching for whole body
- Auto numbering function
- with barcode scanner available
- UPS or capacitor generator is
- recommended Optional AI software available

## Accessories / Complementary Systems

DRgem · GXR Series	– X-Ray Generator	
Standard 32/40/52/68/82kW	<b>Capacitor</b> 32/40/52 kW	<b>UPS</b> 32 / 40 kW
Highlights - High-frequency generator for general radiography - Excellent reproducibility, and linearity - Smaller, lighter modular - 1,280 APR conditions with APR utility software - Tube overloading and ho overheating protection - Real-time monitoring and a	accuracy, design busing self-diagnosis utomatic	
calibration	· · ·	e: 800 W, free-voltage
Adaptive calibration for lousage	<i>y</i>	240 VAC) line power ve: Operation time of up to
Capacitor type: compatib		s and 3,500 x-ray shots

tor type: compatible with standard wall outlet



- 12 hours and 3,5
- during a power failure

## Examion · X-Emergency EXAMION





## Highlights

- Customized container for digital X-ray. • U-Arm or Z-Arm design. Z-Arm
- allows lateral exposures on lying
- patients
- Low maintenance effort
- Excellent image quality
- Patient administration
- Mini-PACS or connection to central archives
- Radiological viewer
- Power: 50 kW
- System concept: Wireless or wired
- Detector size: 14 x 17" / 17 x 17"
- Pixel size: 100 150 µm



## Highlights

- specifically designed for remote controlled table and digital systems
- Enhanced anode heat dissipation, provided by high emittance coating and target design

Severe tests during conditioning

- for repeated loading Ground glass window
  - for consistent HVL

  - Variety of housings allows flexible systems configurations

High anode heat storage



## Highlights

- Integrated DAP chamber and electronics housing (Diamentor RS-KDK, RS)
- Automatic air density correction Wireless data transfer with optional Diamentor BT interface
- Simultaneous measurements of DAP and dose units as well as of the exposure time (Diamentor RS-KDK)
- Optional RS-D display unit Available with RS232 or
- RS485 interface

## I.A.E. · C31-RTM 72

Size

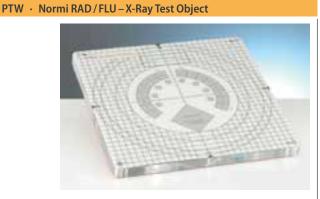
### 0.6/1.2 Power 30 kW / 75 kW Capacity 300 kHU (Anode heat capacity)



range –10°C/+80° C

## Highlights

- Rotating anode X-ray tube unit for
- mobile x-ray equipment with film
- and digital detectors
- · Lead lined aluminium body
- Optional mounting plate for tilting • H.T. cable sockets: type MINI75 4 pin brackets



## Highlights

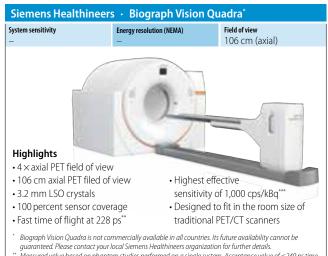
- · Checks all relevant parameters of fluoroscopic and radiographic X-ray units
- Suitable for routine quality checks on over/under couch tubes and C arms
- Includes an attenuation plate for patient simulation
- Complies with DIN 6868-4 and 6868-150
- · Available with the outer format of 300×300 mm or 200×200 mm

# Molecular Imaging PET-CT PET-MRI SPECT-CT SPECT SIEMENS Healthineers

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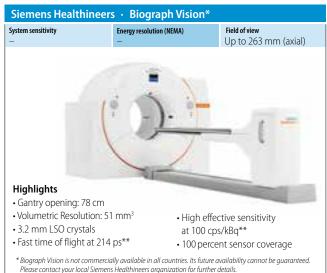
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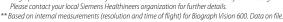
## PET-CT



Measured value based on phantom studies performed on a single system. Acceptance value of ≤249 ps time of flight performance. Data on file.

Compared to current state-of-the-art technologies. Measured value based on phantom studies performed on a single system. Acceptance value of  $\geq$  803 cps/kBq. Data on file.







- Designed with technologies that set the standard in PET/CT, Biograph Horizon brings you premium performance at an attractive level of investment.
- · More accurately stage disease by identifying small lesions early with
- Biograph Horizon's 4 mm, high resolution LSO crystals and time of flight. • Leverage automated tasks and protocols to free up your staff's time -
- so they can focus on what matters most, the patients.
- Reduce your capital investment and keep overhead expenses under control with minimal upfront infrastructure requirements and low operating costs.



## Highlights

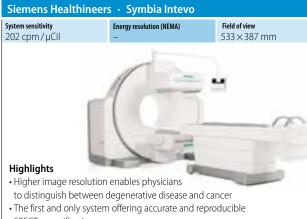
- Exclusive bed design with zero differential deflection between PET and CT • 4 mm LSO crystals for excellent image quality and greater NEMA spatial
- resolution that BGO crystals
- Large 78 cm bore and table capacity of 227 kg (500 lb)
- FlowMotion continuous bed motion

## PET-MRI



- Benefit from motion-free PET images with MR-based motion compensation beyond gating
- Advance PET attenuation correction with whole-body 5-compartment model including bones and HUGE
- Deliver exceptional quality and speed in MR-PET with the latest MR innovations

## SPECT-CT



- SPECT quantification
- Up to 68 percent lower CT dose\* with CARE Dose4D and up to 80 percent lower injected dose\* with IQ-SPECT to reduce patient radiation risk
- Productivity tools and IQ-SPECT save time and can double patient throughput





- iMAR Interative Metal Artifact Reduction – to see more details by reducing metal artifacts. iMAR lets you overcome the effects of metal artifacts in challenging exams
- SAFIRE Sinogram Affirmed Iterative Reconstruction – reduces radiation dose while maintaining image quality
- IVR Interleaved Volume Reconstruction – reconstructs up to
- 32 slices to evaluate small structures
- Dual Energy Scan improves image
- quality with two sequential spiral scans at different energies



## SPECT

Siemens Healthineers · Symbia Evo				
<b>System sensitivity</b> 202 cpm∕µCi	Energy resolution (NEMA) —	Field of view 533 × 387 mm		
	1-			
Highlights	13-	1		
Save up to 50 perce more time and pote	the second s			
tially double patien	5			
	d quality control and collimat as ultra-fast cardiac imaging	or		
5.	nt** and improve patient com	fort with a larger bore;		
5 1 7	v-height patient bed; and hosp	5 5 1		
<ul> <li>Industry-leading* i</li> </ul>	mage quality delivers accurate	e and reproducible clinical		

information to support physicians' diagnostic confidence

\* Based on competitive literature available at time of publication. Data on file. \*\* Patients up to 227 kg.

## Siemens Healthineers · Symbia Evo Excel System sensitivity Energy resolution (NEMA) Field of view 202 cpm / µCi 533×387 mm Highlights Smallest\* room size in its class, reducing costs associated with room remodeling and expansion Ability to image every patient\*\* and improve patient comfort with a larger bore; a high-capacity, low-height patient bed; and hospital bed imaging capabilities • Industry-leading\* image quality delivers accurate and reproducible clinical information to support physicians' diagnostic confidence \* Based on competitive literature available at time of publication. Data on file. \*\* Patients up to 227 kg.

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## **Displays / Printers**

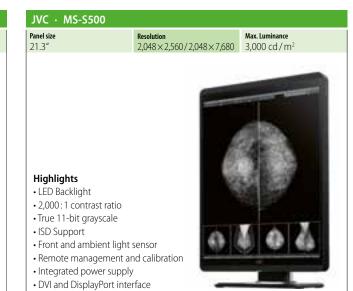


## Displays – Mammo

JVC · CL-S1200		
Panel size	Resolution	Max. Luminance
30.9"	4,200×2,800	1,200 cd / m <sup>2</sup>
Highlights • Panel technology: IPS • 2,000 : 1 contrast ratio • Auto Text Mode • Dynamic Gamma • Front and ambient light • Remote management ar • Integrated power supply	nd calibration	

DVI and DisplayPort interface





## Displays – Color

JVC · CCL650i2		
Panel size 30"	<b>Resolution</b> 3,280 × 2,048	Max. Luminance 1,050 cd / m <sup>2</sup>
Highlights • Panel technology: IPS • 1,000 : 1 contrast ratio • Brightness stabilization s • Remote management • Integrated power supply • Dual DVI / DisplayPort Inj • Auto Text mode and Dyr	, put	



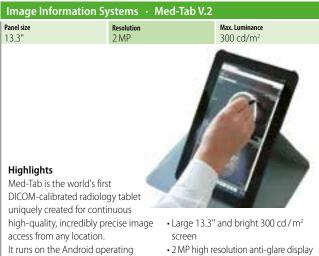
JVC · CL-R211		
Panel size 21.3"	<b>Resolution</b> 1,600 × 1,200	Max. Luminance 500 cd / m <sup>2</sup>
Highlights • Panel technology: IPS • 1,800: 1 contrast ratio • Front and ambient light • Remote management ar • Integrated power supply • DVI and DisplayPort inter • Optional AR coating • Auto Text mode and Dyr	nd calibration face	

## Displays – Color



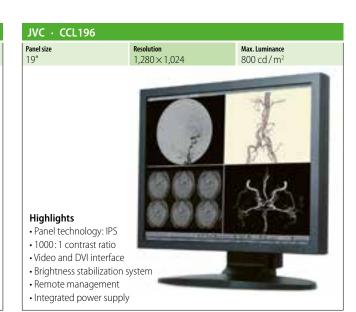
## Displays – Grayscale

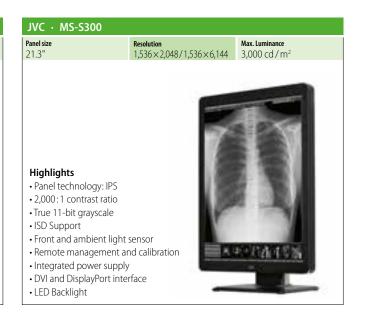
system and is compatible with any zero-footprint DICOM viewer.

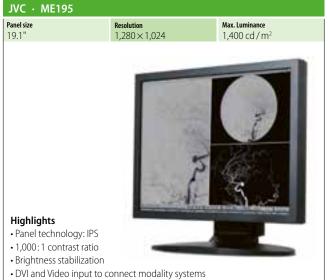


- 11-bit DICOM grayscale calibration:
- a world first









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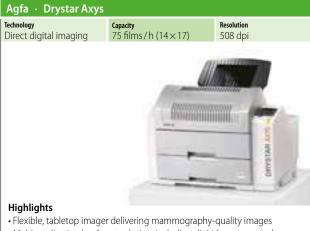
## healthcare-in-europe.com

## **DVD Burner**



- Fully automatic compact system for creating DICOM patient CDs or DVDs
- Highly compatible with all digital DICOM modalities (multimodality)
- Individual labeling (practice / clinic logo)
- Easy integration of DICOM patient data
- Extremely cost effective due to quick printing times and low link consumption
- Format: CD-R, DVD-R, DVD+R, DVD-R DL, DVD+R DL
- Capacity: 30 CDs / h or 15 DVDs / h (burn and print)
- Magazine size: 2 × 50 pcs

## Printers



- Multi-application hardcopy solution, including digital mammography
- Integrated A#Sharp technology for optimized image quality
- Two multi-format trays, each supporting different film sizes and types
- Very short access time for extremely fast delivery of first four prints

## **DVD** Import

## Nexus/Chili · Import Robot



- Works with any PACS
- Nexus / Chili · Burn Gateway



and JPEG

- CHILI viewer in report quality
- Alternative presentation as HTML
  - Works with any PACS
    - External output tray

Agfa · Drystar 5503		
Technology Direct digital imaging	<b>Сарасіту</b> 100 films / h (14×17)	<b>Resolution</b> 508 dpi
Highlights • Multi-modality, high throwith film sorter • Ideal for centralized working be connected to the netwission optimized aff and the source optimized image quality • Three multi-format trays, different film sizes and ty	cflow, can easily work nology for each supporting	TAR SOOT

 Suitable for CT, MRI, DSA, digital R / F, CR, DR and optional mammography

applications

## Printers



- Convenient inlaging with one media size of line
- Provides excellent quality for low operating cost



- A#Sharp technology for optimized image quality
- Convenient imaging with two media sizes on-line (multi-format)
- Veneral entre encode time encode a size of the distribution of the line of the size of the
- ${\boldsymbol{\cdot}}$  Very short access time ensures fast printing of small print jobs

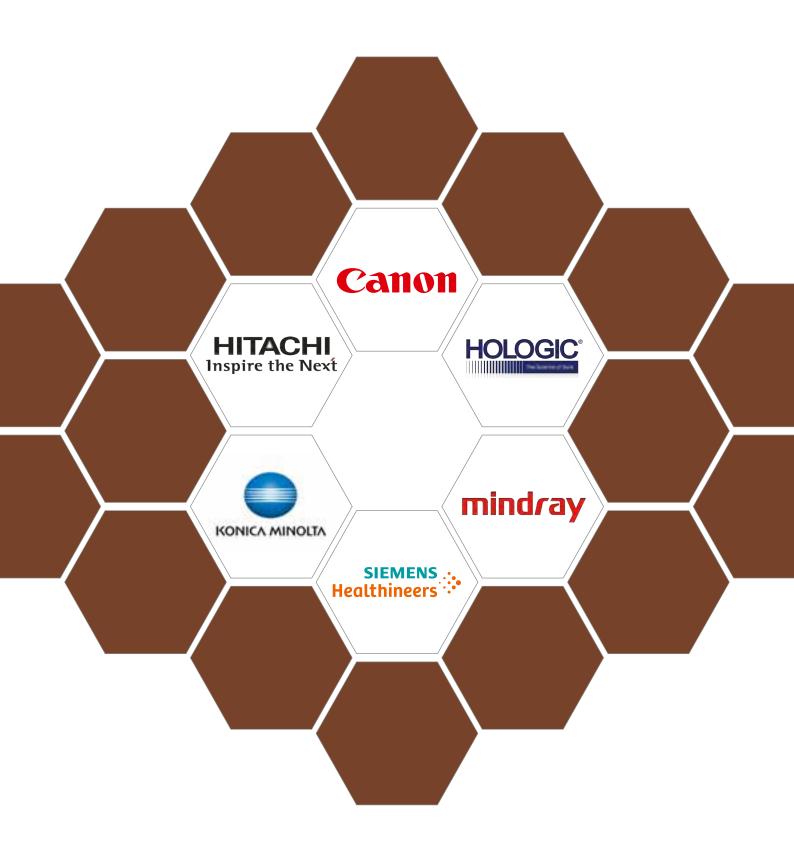






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breast scan guide

Canon · Aplio i800		
Frequency range 1 – 33 MHz	Display mode 2D/3D/4D	<b>Display size</b> 23"
Highlights • Intelligent Dynamic Mic Imaging, ApliPure+, Diff Intelligent Superb Micro High Frequency	ro Slice, iBeam, Precision erential THI, TSO, ADF, Vascular Imaging, Ultra ncl. VRI, MicroFlow imaging,	
FlyThru virtual endoscop Strain and Quad View Sh Dispersion Imaging, Atte	ear-wave elastography	
MicroPure, Auto IMT, RAI	5 5.	CR - 81

Frequency range 1 — 24 MHz	Display mode 2D/3D/4D	Display size
1 - 24 101112	207 307 40	
Highlights		4,000,000
	ic Micro Slice, iBeam,	- St.
5 5.	ApliPure+, Differential	Anna 10
Vascular Imaging	lligent Superb Micro	the set
CEUS; Advanced C	EUS incl. VRI,	The second second
MicroFlow imagin	J.	
• 4D (surface, MPR, Shadow Glass)	MultiView, Luminance,	1 II
	loscopy, Smart Fusion,	IN DOWN
	ew Shear-wave elasto-	A BAR
5 1 7. 1	Imaging, Attenuation	And in case of the local division of the loc
Imaging, MicroPu	ro Auto MAT DADS	and the second sec

Canon · Aplio	i600		Canon · Aplio a
Frequency range 1 — 22 MHz	Display mode 2D/3D/4D	Display size 23"	Frequency range 1,8 — 18 MHz
Differential THI, T Micro Vascular Im • CEUS; Advanced G imaging, Quad Via • 4D (surface, MPR, Shadow Glass) • FlyThru virtual en	CEUS incl. VRI, MicroFlow		Highlights • aBeam, Precision Im Differential THI, TSO, Micro Vascular Imag Matrix technology • CEUS; Advanced CEU imaging • 4D (surface, MPR, M • Smart Fusion, Strain elastography, Attenu MicroPure Auto IMT

н

98

Strain and Shear-wave elastography, Attenuation Imaging, MicroPure, Auto IMT

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	Marrow and	• a
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	Sec. 1	• •
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		• 4
1	10000	• S
	Constanting	e
	ATT	e N V
		V

0	Smart Fusion, Stra elastography, Atte	nuation Imaging, MT, RADS, prostate fusion,	1
	Canon · Aplio a	a450	
	Frequency range 1.8 – 18 MHz	Display mode 2D/3D/4D	<b>Dis</b> 21
			5

## Highlights

- aBeam, Precision Imaging, ApliPure+, Differential THI, TSO, ADF, Superb Micro Vascular Imaging, Doppler Luiminance
- CEUS; Advanced CEUS incl. VRI, Micro-Flow imaging • 4D (surface, MPR, MultiView, Luminance)
- Smart Fusion, Strain and Shearwave elastography, MicroPure, Auto IMT, AUTO NT, Wall Motion Tracking



play size

<b>quency range</b> 3 — 18 MHz	Display mode 2D/3D/4D	<b>Display size</b> 23"
		Aplica
<b>lighlights</b> aBeam, Precision Imagin Differential THI, TSO, ADF Micro Vascular Imaging, I Matrix technology	, Intelligent Superb Doppler Luminance,	
CEUS; Advanced CEUS in imaging 4D (surface, MPR, MultiV Smart Fusion, Strain and elastography, Attenuatio MicroPure, Auto IMT, RAI	iew, Luminance) Shear-wave n Imaging,	Im

Canon · Aplio a550 Frequency range 1,5 — 18 MHz Display mode 2D/3D/4D

## Highlights

- aBeam, Precision Imaging, ApliPure+, Differential THI, TSO, ADF, Intelligent Superb Micro Vascular Imaging, Doppler Luminance, matrix technology
- CEUS; Advanced CEUS incl. VRI, Micro-Flow imaging and CEUS quantification
- 4D (surface, MPR, MultiView, Luminance, Shadow Glass)
- FlyThru virtual endoscopy, Smart Fusion, Strain and Shearwave elastography, MicroPure, Auto IMT, AUTO NT, Wall Motion Tracking



Display size

23

RADBook 202	21
TV/DD00K 202	

onnasouna		
Canon · Xario 200G		
Frequency range 1.8-18 MHz	Display mode 2D/3D/4D	Display size 21.5"
<ul> <li>High Density Beamforme Differential THI, Tissue Enl Dynamic Flow, Superb M</li> <li>4D-imaging; SR, MPR, Mul</li> <li>Shearwave elastography strain elasto, Auto IMT, Str CEUS contrast imaging, Pe</li> <li>iStyle+ productivity suite agile housing, height adju</li> </ul>	5 inch wide screen display r, Precision Imaging, ApliPure hancement, Advanced icrovascular Imaging (SMI) tiView, Freehand 3D, Luminar	cking, cations el,

Canon · Viamo	o sv/
---------------	-------

Frequency range 1.5 – 12 MHz

Highlights

## Display mode 2D Display size 12

- Portable ultrasound system • Multi touch screen, Tablet mode possible
- Single transducer input, expandable to three transducers
- Battery and AC operation, very fast boot time
- (< 10 s from standby to scanning), three hours battery support High color sensitivity, exceptional image quality
- Highly programmable Touch Screen, few buttons, easy to operate,
- protocol assist. D-THI. Precision Plus, Aplipure+, Cardiac measurement kit and OB measurement package kit are pre-installed
- · Point of Care Ultrasound applications, General Imaging, Sports Medicine, MSK, Home healthcare

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Frequency range	Display mode	Display size
1.8–18 MHz	2D/3D/4D	21.5"
Highlights		April 1
from standby, 21.5 i • High Density Beamf	ry autonomy, two seconds nch wide screen display former, Precision Imaging, ial THI, Tissue Enhanceme Flow	
<ul> <li>4D-imaging; surface</li> <li>Freehand 3D, Lumin</li> <li>Realtime elastograp</li> <li>Point of Care Ultrasc</li> </ul>	e rendering, MPR, MultiVie nance hy, Auto IMT, Stress Echo, pund applications	E.
panel, agile housing	suite with fully customiza 1, height selectable consol Quick Assist, Extensive line	e, Quick

Frequency range	Display mode	<b>Display size</b>
1.5—18 MHz	2D/3D/4D	15"
Speckle reduction, • 3D-imaging: surfard depth cueing • General Imaging, F applications • Auto IMT, needle e Quadplex • Magnesium alloy F	· · · ·	

## Hitachi · Arietta 850SE Frequency range 1 – 22 MHz Display mode 3D/4D Display size 23 Highlights · Multi-disciplinary Premium platform, ergonomic design Pure Image Symphonic Architecture • 23" LCD monitor for highest contrast • Wide range of transducers for Gl, interventional guidance, urology and TEE applications, CMUT Advanced modalities: SWM, ATT, Real-time Elastography, Combi-Elasto, CEUS, RVS Fusion, Needle and Body Motion tracking, 3D/4D

 Advanced analysis: TIC, eTracking, WI, 2DTT, Protocol assistant, Auto Measurements



Hitachi · Arietta	850	
Frequency range 1 - 22 MHz	Display mode 3D/4 D	Display size 22"
guidance, urology a • Advanced modalitie Elastography, Comb 3D SIM navigator, E- Body Motion trackin	onic Architecture or highest contrast ducers for GI, interventiona nd TEE applications, CMUT s: SWM, ATT, Real-time i-Elasto, CEUS, RVS Fusion, field Simulator, Needle an ig, 3D/4D TC, eTracking, WI, 2DTT,	100



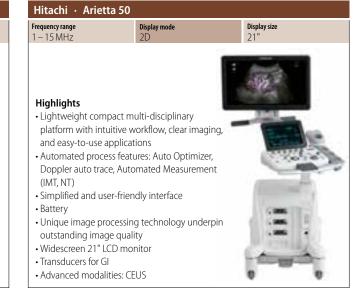
Protocol assistant, Auto Measurements

## Hitachi · Arietta 65 Display mode 3D/4D Frequency range Display size 1-18 MHz 21.5 Highlights Compact multi-disciplinary platform with comfortable workflow, high definition imaging and useful application from premium platform · Automated process features: Protocol Assistant, Auto-Optimizer, Auto Measurement Battery Unique image processing technology underpin outstanding image quality • 21.5" LCD Widescreen Monitor, fully articulating monitor arm

• Wide range of transducers for GI, urology and **TEE** applications

Protocol assistant, Auto Measurements

 Advanced modalities & analysis: SWM, ATT, 3D/4D Dual gate Doppler, Strain Elastography, CEUS, 2DTT



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### Hologic · SuperSonic Mach 30 Frequency range Display mode 1-20 MHz ЗŪ

## Highlights

SuperSonic Mach 30 ultrasound system with UltraFast Imaging is designed to help increase efficiency and diagnostic accuracy in your practice. The SuperSonic Mach 30 system features innovative imaging modes, such as ShearWave Plus elastography for tissue stiffness evaluation in real time and 3D Imaging, for unique visualizations of breast anatomy and detailed characterization of lesions. It is equipped with intuitive SonicPad touchpad, designed to reduce examination time and operator fatigue.



Display size

## mind*r*ay

## Ultrasound



# Image MX1 Display mode Display size Up to 14 MHz 2D (BW/color) and TAM 12.1"

## Highlights

- •Real point-of-care ultrasound
- Dual sonic technology
   iXRet-technology
- IXRet-technology
- Sonimage UI conceptOne-touch image optimization
- for quick operation • SNV technology –
- Simple Needle Visualization
- Up to 2H operation
- Weight: 4.5 kg (incl. battery)
   Tailored solution for MSK specialists, rheumatologists, anesthesiologists and intensivists, vascular specialists



## Designed by users for users

## Easy disinfection Support you during COVID-19

## **Unrivaled lightweight**

kg main unit 44 mm thickness





ME7 Hand-Carried Ultrasound System Emergency, Anesthesia, Critical Care

Mindray Medical · Resona R9				
Frequency range 1 - 23 MHz	<b>Display mode</b> 3D/4D	<b>Display size</b> 21.5"		
Highlights				
Advanced ZST <sup>+</sup> platform     A new standard of image	ALC: NO.			
<ul> <li>More advanced tools for confident diagnosis and clinical research: HiFR CEUS, High frame rate STE, uHIT, iFusion, V Flow</li> </ul>				
Intelligent tools with more accuracy: Smart Breast a	re efficiency and	0 0		



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Mindray Medical · DC-80 with X-Insight				
Frequency range 1 – 20 MHz	Display mode 3D/4D	<b>Display size</b> 21.5"/23.8"		
<ul> <li>Highlights</li> <li>Single Crystal with 3T tec ComboWave transducer,</li> </ul>	57	- Jan		
<ul> <li>transducer</li> <li>Best in class shear wave( NTE (shell), UWN<sup>+</sup> CEUS,</li> <li>Dual-wing floating arm,</li> </ul>	STE & STQ), ART Flow, TT QA, LVO			

Μ Free 1 –

gestures, MedTouch

Mindray Medical • DC-70 Exp with X-Insight

and ultra-slim touch screen (13.3")

- Mindray Medical · DC-80A with X-Insight Frequency range 1-20 MHzDisplay size 23.8" Display mode 3D/4D Highlights Superb 3D/4D with single crystal volume and Hyaline Outstanding ABD image in both penetration and resolution Most intelligent Smart Planes CNS and Smart Face · Large touch screen (13.3") & Full HD monitor (23.8"), five active sockets
- Best in class shear wave (STE & STQ)
- Built-in battery for continuous scanning

Frequency range 1 - 20 MHz	<b>Display mode</b> 3D/4D	<b>Display size</b> 13.3"/21.5"/23.8"
Highlights • Top in class 3D/4D wit Hyaline	5 ,	Dist.
Best in class ABD imag and resolution     Most intelligent Smart and Smart Face     Largest Full HD monite	: Planes CNS	20

RADBook 2021

Mindray Medical • DC-40 with Full HD				
Frequency range 1 — 16 MHz	Display mode 3D/4D	Display size 21.5"		
Highlights • 21.5" full HD LED monitor with 1,920 × 1,080 resol • Upgraded one-key auto • One-key to switch the e	or ution image optimization solutio xam mode rt Face, Smart FLC and IVF			

Frequency range	Display mode	Display size
1 – 16 MHz	3D/4D	15"
Doppler offering ea • Rich in technology single crystal and h	v with iTouch	ty vith



• E-Spatial Navi



• iNeedle+

Contrast imaging

- Mindray Medical TE7

   Frequency range 1 – 16 MHz
   Display mode 3D
   Display size 15"

   Highlights

   - Touch enabled repsonse providing simple control and setting optimization

   - Touch -screen gestures such as pinch to zoom in or out

   • Three second boot up from standby and swift touch response of settings

   • Equipped with efficiency-boosting features eSpacial Navi, iNeedle<sup>+</sup>, AutoEF, iZoom, iTouch and Smart Track
- Easy to transport and store, can be mounted on trolley, desktop table or wall

 Highlights
 2S3 featured

 • ZST featured
 • Focused image across the full field view

 • CEUS with superior sensitivity, spatial resolution and temporal resolution
 • ARFI

 • Complete transducer solution with transducer tracking technology
 • Automatic Image Optimization reduces exam time

Contract Imaging

Siemens Healthineers · Acuson Sequoia Ultrasound System				
Frequency range 1 — 18 MHz	Display mode 2D/3D/4D	Display size 15.6" / 22"		
Highlights Powered by BioAcoustic i reduce the effects of ultra among users, patients an • See more: See deeper ar latest InTune transducer technology eliminating conventional focal zone • Know more: Advanced a expand clinical informat technologies that impro	maging technology to sound variability d technology. nd clearer with the s offering InFocus the need for a upplications ion with imaging	15.0 722		

5 1	hared-service system for It with one of the industry	s
• Five active transduce	er ports and one CW port ers for a wide variety of adiology, interventional	

noise and offer premium image quality with industry-leading elasticity solutions



Siemens Healthineers · Acuson P500 Ultrasound System				
Frequency range 1.3 — 16 MHz	Display mode 2D	Display size 15.4"		
Highlights • Innovative technologies detect and prevent moti noise, and simultaneous • 15" infrared touch screer accuracy	on artifacts, reduce ly enhance color			

- Increase patient throughput with mobile quick scanning and boot-up times of less than 30 seconds
- The new IntraCardiac Echocardiography (ICE) Edition integrates the imaging capabilities of the Acuson AcuNav catheters providing real-time visualization of cardiac anatomy within the heart

15.4"	
10001	
and the second s	
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Nen-W	
章 章	

Frequency range 1.3 — 16 MHz	Display mode 2D/3D/4D	<b>Display size</b> 10.4" / 21.5"
Highlights • Powerful platform driv and built for performa	, ,	
<ul> <li>Intuitive user interface</li> <li>Intuitive user interface</li> <li>keystrokes and 3x more</li> <li>21.5" HD display and 2</li> <li>transducer provides ex</li> <li>10.4 inch touch display</li> <li>Transducer compatibil</li> </ul>		

Siemens Healthineers · Acuson NX3 Ultrasound System									
	Frequency range 1.3 – 12 MHz	Display mode 2D/3D/4D	<b>Display size</b> 10.4"/21.5"						
	Highlights • Powerful platform driver for performance • Intuitive user interface w keystrokes and 3 x more • 21.5" HD display provide of view	n by efficiency and built with up to 28% fewer user-defined keys s expanded field							
	<ul> <li>10.4 inch touch display v</li> <li>Transducer compatibility legacy Siemens Healthin</li> </ul>	with existing and	0						

Frequency range 2 - 10 MHz	Display mode 2D	Display size 21.5"
		(0.00 × 50,000)
a cost-efficient, t wide range of ex	n imaging performance using en-transducer set to perform a am types at a sustainable value	
	oanel design combined with up ng transducer ports optimize cy	

Siemens Healthineers · Acuson NX2 Elite Ultrasound System

- Large 21.5" 1,080 p HD display; Twice the pixel density
- Migrated optional advanced clinical applications such as DTI, eSie Touch elasticity & advanced foursight technology



Siemens Healthinee	rs • Acuson NX2 U	trasound System
Frequency range 2 - 10 MHz	Display mode	Display size
Highlights • Provides premium ima a cost-efficient, eight-t a wide range of exam t • Intuitive control panel to four front-facing trai workflow efficiency • Large 21.5" 1,080 p HD density • Simplified control panel	ging performance using ransducer set to perform /pes at a sustainable valu design combined with u nsducer ports optimize display; Twice the pixel	

Siemens Healthine	eers · Acuson SC2000 P	Prime Ultrasound System
Frequency range 1.25 — 10 MHz	Display mode 2D/3D/4D	Display size 21.5"
as the only system to and ICE and TrueFusio Speed and precision Al-powered applicati eSie LVA, eSie Left He Advanced application and interventional gu	for the echo lab with ions: eSie Measure, eart and eSie Valves ns to support routine echo uidance with eSie PISA, nt Ventricular Analysis	

One-click automated aortic and mitral valve modeling and measurements within seconds with eSie Valves





Siemens Healthineers · Acuson Freestyle Ultrasound System



- Enhanced needle visualization and Pixelformer image processing
- architecture on an expanded image display may improve procedural confidence in interventional settings
- Automatically populate patient registration data between systems with Artis Patient Synchronization using Artis Access

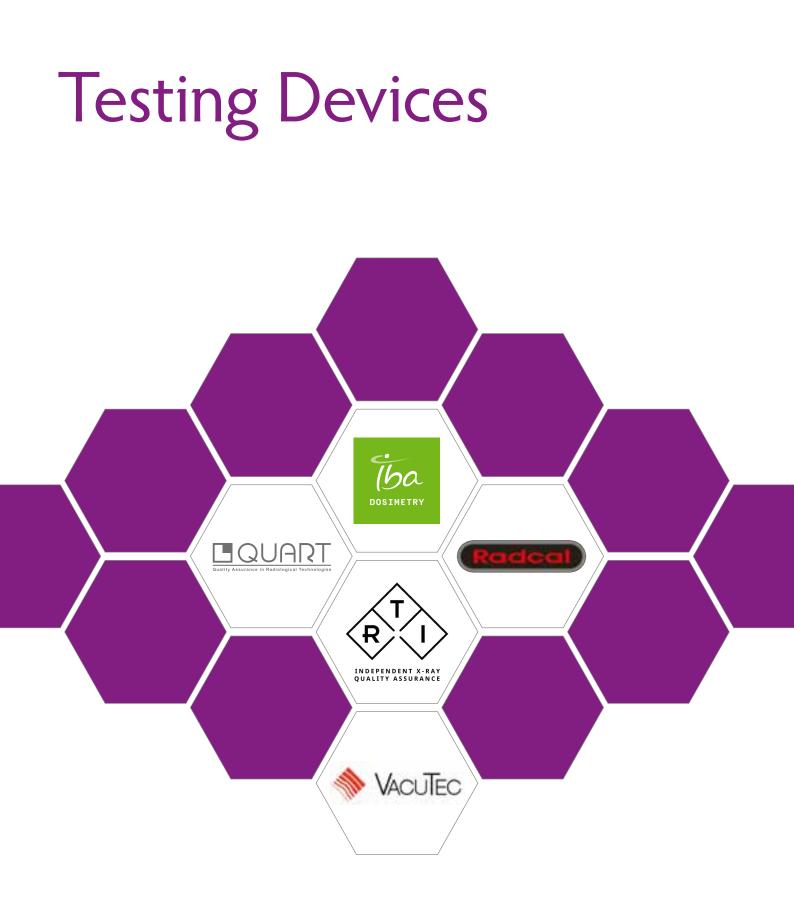
## Frequency range 2 – 15 MHz Display size Display mode

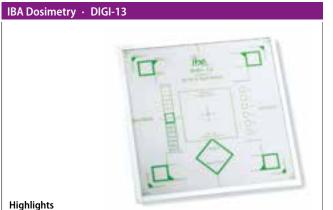
## Highlights

- With cable-free technology to offer unrestricted access to practitioners at the point of care, allowing quicker turnaround time
- Enhanced needle visualization and Pixelformer image processing architecture on an expanded image display improve procedural confidence in interventional settings
- Empowered workflow with zero cable-drag and single-user operation via integrated scanning controls

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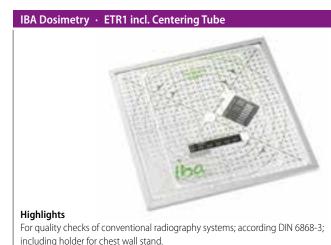
For quality checks at digital radiographic systems (CR/DR) according DIN 6868-13.

Image scale

Geometrical distortion

Artifacts

- Test parameter:
- Uniformity
- Spatial resolution
- · Alignment of light and beam field



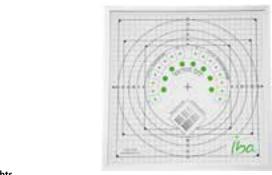
including holder for chest wall stand.

Test parameter: Spatial resolution

Low contrast

- Alignment of light and beam field
- Geometrical distortion
  - Measuring areas for optical density

IBA Dosimetry · Test Device Primus A



## Highlights

Test device Primus A is designed according DIN 6868-150 & DIN 6868-4 for Quality assurance at radiography and fluoroscopy systems.

- 17 steps for dynamic verification
- 8 low contrast sensitivity circles

IBA Dosimetry · Mammo-152

• Grid for easy and efficient determination of light- & beam field alignment as well as geometrical distortions



IBA Dosimetry · Mammo-14



## Highlights

For guality assurance / constancy test at digital mammography systems according DIN 6868-14.

- 40 mm base plate with integrated AI step wedge and 2 rows of steel balls, for checking the image limitation towards the thorax side.
- 6 mm structural plate with recess for test inserts
- Test insert: PMMA, SDNR & High Contrast
- 3 × 20 mm / 1 × 10 mm / 1 × 4 mm PMMA attenuation plates
- 2 × 20 mm PMMA full field attenuation plate (260 × 320 mm)

## IBA Dosimetry · Mammo-162



## Higningnus

For quality assurance / acceptance test of digital Mammography Systems, according DIN 6868-162.

- 40 mm base plate with integrated AI step wedge and 2 rows of steel balls, for checking the image limitation towards the thorax side.
- · 6 mm structural plate with recess for test inserts
- Test insert: PMMA, SDNR & High Contrast
- + 3  $\times$  20 mm / 1  $\times$  10 mm / 1  $\times$  4 mm PMMA attenuation plates
- 1 × 20 mm PMMA full field attenuation plate (260 × 320 mm)
- For guality assurance / acceptance and constancy tests according DIN 6868-152, DIN 6868-7, IEC 61223-3-2 and EPQC (EUREF) in conventional mammography.

Highlights

- Test parameter:
- Object thickness and tube voltage compensation resp. AEC reproducibility
- Spatial and contrast resolution Artifacts/Geometry
- Check of the image limitation towards the thorax side



Phantom for measurements of CTDI according IEC 60601-2-44, IEC 61223-3-5, IEC 61223-2-6.

- 1 Adult Head-Phantom, 16 cm diameter, 5 holes
- 1 Adult Body anulus, 32 cm diameter, 4 holes
- 9 Acrylic rods for plugging in all phantom holes

## IBA Dosimetry · DSA Test Device



## Highlights

For Quality Assurance of "Digital Subtraction Angiography" (according DIN 6868-150, DIN 6868-4, IEC 61223-3-3)

Test parameter: Cupper dynamic step wedge with logarithmic check DSA contrast sensitivity Artefacts



\*Dosimax plus A HV with integrated high voltage for meas-urements at CTs with ionization chamber DCT10-RS



## Highlights

Single channel dose meter according IEC 61674 for acceptance tests at Radiography-, Fluoroscopy-, Dentaland Mammography systems. Available with RQA/RQM/DCT10-RS\* • Time: 1 ms – 9,999 s

Measurement parameter (RQA): • Dose: 200 nGy - 9,999 mGy

- Dose rate: 80 nGy/s 70 mGy/s



- according IEC 60601-2-44, IEC 61223-3-5, IEC 61223-2-6.
- Innovative 3-part nested phantom according FDA 21 CFR 1020.33.
- 1 Pediatric Phantom, 10 cm diameter, 13 Acrylic rods for plugging in all 5 holes
- 1 Adult Head anulus, 16 cm diameter,
- 4 holes
- 1 Adult Body anulus, 32 cm diameter,
- 4 holes

  - phantom holes

## IBA Dosimetry · Multimeter MagicMaX Universal



Dose/dose rate - dose per pulse - kVp/PPV -time -total filtration - HVL wave form - dose, dose rate length product for CT

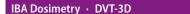
## IBA Dosimetry · Dosimax plus I



Single channel dose meter according IEC 61674 for quality assurance at Radiography-, Fluoroscopy-, Dentaland Mammography systems. Available with ROA/ ROM / DEDX

Highlights

Measurement parameter (DEDX): • Dose: 20 µGy – 9,999 mGy - Dose rate: 20  $\mu Gy/s-400$  mGy/s • Time: 1 ms - 9,999 s





## Highlights

Test of 3D image quality of "Digital Volume Tomography" (DVT) systems, according DIN 6868-150 / DIN 6868-4. Optional Carbon adapter for easy and precise positioning in the beam without artifacts.

- Spatial parameter:
- Detail resolution
- Uniformity and noise
- Laser marks for convenient
- positioning in iso-center

## IBA Dosimetry · Spot-Luminance Meter LXcan

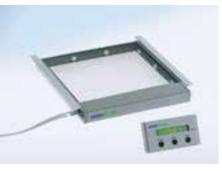


### Highlights

For luminance measurements at image display devices according

- DIN 6868-157, DIN V 6868-57,
- IEC 61223-2-5 and AAPM TG18.
- Distance and contact measurement
- Easy targeting with a built-in camera and display
- Ultrasound distance sensor for the optimal distance
- Optional photometric detector LX-LS to measure the Illuminace in combination with LXcan

## IBA Dosimetry · KermaX plus SDP



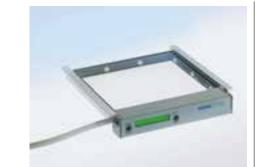
## Highlights

Easy to install standard dosimeter dedicated to measure DAP and DAP rate for patient dose monitoring. Rectangular, transparent ionization chamber and separate 10-digit background lighting LCD "Single Line Display".

IBA Dosimetry · KermaX plus DDP "Duo"

- Measurement parameter:
- DAP rate:
- 0.01 µGym<sup>2</sup>/s 3,000 µGym<sup>2</sup>/s
- DAP resolution: 0.01 µGym<sup>2</sup>
- Interface: 1 × RS232 (RIS/HIS or printer)





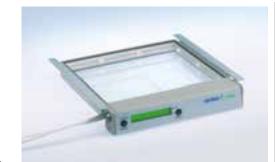
## Highlights

Ideal solution for a quick and convenient retrofit installation to measure DAP and DAP rate for patient dose monitoring. Rectangular, transparent ionization

nal background lighting LCD display.

- Measurement parameter: • DAP rate:
- $0.01 \,\mu\text{Gym}^2/\text{s} 3,000 \,\mu\text{Gym}^2/\text{s}$
- chamber with integrated 10-digit inter-
  - Interface (optional): RS232, RS485

## IBA Dosimetry · KermaX plus TinO IDP



## Highlights

Two in One – Dose Area Product and dose measurements in one Chamber. Rectangular, transparent ionization chamber with integrated 10-digit internal background lighting LCD display for easy and smart installation at collimator rails.

Measurement parameter: • DAP rate:

- 0.01 μGym<sup>2</sup>/s 3,000 μGym<sup>2</sup>/s
- DAP resolution: 0.01 µGym<sup>2</sup>
- Interface (optional): RS232, RS485, CAN

## Highlights

Multifunctional duo-channel dosimeter dedicated to measure DAP, DAP rate and exposure time in patient dose monitoring. Two Rectangular, transparent ionization chamber with integrated electronics and one separate "Dual Line Display" with two very bright LED display lines.



Measurement parameter:

- + DAP rate: 0.01  $\mu Gym^2/s-3{,}000\,\mu Gym^2/s$
- DAP resolution: 0.01 µGym<sup>2</sup>
- Interface: 2  $\times$  RS 232 (RIS/HIS and printer)





## Highlights

- The Quart DVT 150 phantom is designed to meet the requirements of the German DIN 6868-150 x-ray imaging acceptance test standard.
- Handling and positioning of the phantom is easy and straight-forward. It enables quick and simple contrast resolution tests for 3D, ENT and angiography x-ray applications.



## Highlights

- The mamTOMO phantom is a novel approach in DBT QA. The phantom incorporates 3D test objects that simulate lesions and non-spiculated masses in a non-homogeneous background.
- An associated automated evaluation software assists at all test stages from image processing, statistic data evaluation to extrapolation of threshold diameters for lesion perceptibility.

## Quart · SPdl R/F IQ Phantom



## Highlights

- The Quart SP dl phantom enables assessment of digital x-ray equipment according to the german DIN 6868-150 and DIN 6868-4.
- The phantom is available with a unique kV test object to assess radiation quality and generator performance on a routinely basis.
- For ease of use, a frame / extension is provided as well as a wire-mount system for use with wall stand units.

## Quart · Anthropomorphic X-Ray Phantoms

## Highlights

- Our German-made anthropomorphic phantoms allow repeated x-ray imaging of specific body regions. They are used in x-ray trainings or for specific equipment tests under life-like conditions.
- The phantoms comprise of real human bones embedded in tissue-equivalent material.
- Available phantom versions
- Full Body
- Head
  - Hand / arm
  - Hip / spine
  - Foot / leg
  - Special training phantoms



## Quart · didoNEO R Diagnostic X-Ray Dosemeter



### Highlights

The Quart didoNEO introduces a new approach to diagnostic x-ray meters: it features the most compact base unit and most compact detector in the x-ray meter industry. The didoNEO R is used for

- QA and service in radiography, (Pulsed) fluoroscopy, DSA, dental, 3D (CBCT).
- Compact multi-functional state-of-the-art solid state detector
- Enables measurements in spots with limited space
- Measures behind scatter radiation grids
- Direct measurement of DLP/DWP in dental OPG

## Quart · didoEASY Diagnostic X-Ray Meters



## Highlights

- The Quart didoEASY meters are designed for quick measurements of dose, dose rate and exposure time in X-ray QA/QC and service.
- didoEASY meters automatically compensate all radiation qualities in their area of application. Three meter versions are available: for R/F and dental (50 150 kV), for mammography (25 40 kV), and one for the full diagnostic range (25 150 kV).

## Quart · nonius Digital X-Ray Ruler



## Highlights

• The Quart nonius is a sophisticated, fully electronic x-ray ruler to verify size and geometrical properties of x-ray fields in radiography and mammography. It can also be used to analyse fanned CT or dental OPG x-ray beams.

- Its resolution capabilities and precision go down into to the nonius range of 0.1 mm!
- Take only 3 steps to obtain the test result: Position Expose Evaluate.

## Quart · didoCT Pencil Chamber Meter



## Highlights

The Quart didoCT pencil-shaped ion chamber meter is designed for easy and precise dose-width product measurements.

- The meter does not require any pre-setting procedure for direct reading of DWP, rate and time.
- As an optional feature, the Quart didoCT can be supplied with free-in-air direct HVL measurement capability. This device feature is unique and had only been introduced by Quart in a CTDI chamber.

## Quart · didoSVM Precision Survey Meter



## Highlights

- The Quart didoSVM medical survey meter is designed to detect beta, gamma and x-ray sources of very low intensity around diagnostic x-ray equipment as well as in radiation therapy environments. Excellent energy response to measure radiation rate and dose.
- Its detection technology is based on solid-state components, enabling measurements with high sensitivity and very quick response.

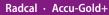
## Quart · DSA Test Phantom



### Highlights

- The Quart DSA phantom features longitudinal sliding technique to minimise structural movement artefacts in the test image. It complies with DIN 6868-4, 6868-150 and IEC 61223-3-3.
- A special characteristic of the phantom is that it realistically reproduces the injection procedure of the contrast agent into vessels with different attenuation properties.







- The most dynamic X-ray QA meter available
- Includes customizable easy-to-use software
- Supports all medical X-ray modalities
  - Report generation
- Operates with all of Radcal's ion chambers, solid state, mA and light sensors
- Waveform analysis
  - Optional WiFi capability

## Highlights

Radcal · 10X6-60DAP

- Ideal for Dose Area Product (DAP) of
- Pan-Dental or CBCT-Dental · Easy to use mounting alignment fixture
- Unit selection of Gy-m<sup>2</sup> or Gy-cm<sup>2</sup>
- Flat energy response • Plug and Play with your existing Radcal Touch or Accu-Gold system no calibration adjustments



## Highlights

The new power in X-ray QA software is here!

The industry-leading Ocean Next - with its three different license levels of Quick, Advantage, and Professional - is a swift, easy-to-use application for routine controls, or for customized application with workflow, automatic tests, and traceability. It is compliant with all Piranha and Cobia meters as well as the new RTI Scatter Probe.



## Highlights

The RTI CT Ion Chambers 10 and 30 cm are both pencil-type ion chambers intended for measuring the exposure output level of CT scanners in a CTDI Phantom or free-in-air. The Ion Chambers are compatible with the RTI Chamber Adapter for use with the Piranha and Cobia meters. They can also be used with the older RTI Barracuda and Solidose 400 models.



## Highlights

Cobia is RTI's easy-to-use solution for quick and efficient measurements of a variety of radiography and fluoroscopy parameters. All Cobias are wireless, come ready-to-use with Bluetooth connection, and include Ocean Next software. Select the model that suits your needs, and only pay for what you need to measure!



come ready-to-use with Bluetooth connection, and include Ocean Next software. The MULTI model can be used for X-ray QA of all modalities - R/F, Dental, Mammo, and CT – whereas the other four Piranhas are dedicated to one specific modality. With automatic connection to various RTI accessories, just plug and play.

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HiE

<image>

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## European Hospital

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## Highlights

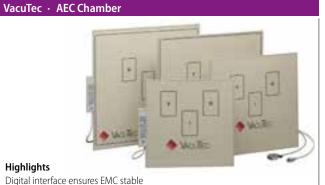
A leakage and scatter detector in one!

The revolutionary RTI Scatter Probe is a rugged, flat, solid-state detector for leakage and scatter detection in X-ray environments. Its unique design - two separate detector areas of 10 and 100 cm<sup>2</sup> – fulfils current regulations and standards for X-ray leakage and scatter measurements. Connects to Ocean Next software, via a USB, for reading and reporting.

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signal transmission and provides an open dose working range.

Technical specs:

- Tube voltage: 40 kV ... 150 kV
- Dose rate range: 0.5 ... 1,000 µGy/s
- Aluminum equivalent: <0.75 mm Al
- Analog interface: ramp voltage 0 – 10 V
- Digital interface:
- differential pulses (RS422)
- Resolution: 0.025 µGy
- Pulse width: 2 µs



## Highlights

The VacuDAP-C systems for measurement of DAP and Dose are basically integrated in interventional devices with customized calibration settings.

VacuTec · VacuDAP / VacuDAP duo

### Technical specs:

- Resolution DAP: 0.01 µGym<sup>2</sup>
- Resolution Dose: 0.005 mGy
- Interface:
- RS485, RS232, Bluetooth, CAN, USB
- Active area: Ø (8 . . . 100) mm



## Highlights

- VacuDAP chamber is now available with Bluetooth technology.
- Perfect suitable for DR upgrades and mobile X-ray units.
- The battery ensures simplest
- installation ever.
- Technical specs:
- Resolution DAP: 0.01 µGym<sup>2</sup>
- Active area:
- 123×123 mm/147×147 mm
- Battery operation time: about 24 h



- The VacuDAP family provides a wide range of DAP and Dose measuring solutions for most of the diagnostic X-ray systems in the market.
- Interface:
  - RS485, RS232, Bluetooth, CAN, USB
- Active area:
- 123×123 mm/147×147 mm

		Computed Tomography	Magnetic Resonance Imaging	Injectors	Interventional Systems	Artificial Intelligence	IT Systems	Mammography	R/F Film-Screen	R/F Digital	Molecular Imaging	Displays	Printers	Ultrasound	Testing Devices
AB-CT – Advanced Breast-CT GmbH Henkestr. 91 91052 Erlangen, Germany tel +49 9131 97 31 00 ask.crm@ab-ct.com www.ab-ct.com	АВ-СТ 🧭	16						71							
Agfa HealthCare Septestraat 27 2640 Mortsel, Belgium tel +32 3 444 94 44 agfahealthcareinfo.be@agfa.com www.agfa.com	AGFA 🝻 HealthCare						57 60 62 66 67								
Agfa Septestraat 27 2640 Mortsel, Belgium tel +32 3 444 21 11 www.agfa.com	AGFA 🧇									86 87 88 99 100 104 105 110 115			123 124		
allMRI GmbH Südstr. 23 74226 Nordheim, Germany tel +49 7133 237 02 20 mail@allmri.com www.allmri.com			34												
Arcoma AB Annavägen 1 352 46 Växjö, Sweden tel + 46 470 70 69 00 service@arcoma.se www.arcoma.se	🛦 ARCOMA									88					
BMS Informationstechnologie GmbH Diesterweggasse 7/1 1140 Vienna, Austria tel +43 1 524 81 34 00 info@bms-austria.com www.easydose.eu	BMS NEORMATIONISTECHNOLOGIE* GMBH						68								
Bracco Injeneering S.A. Avenue de Sévelin 46 1004 Lausanne, Switzerland tel + 41 21 621 74 00 infoinjeneering@bracco.com www.imaging.bracco.com	BRACCO			36 39			68								
Canon Electron Tubes & Devices Co., Ltd. 1385 Shimoishigami Otawara-shi, Tochigi 324-8550, Japan tel +81 287 26 66 66 https://etd.canon/eng	CANON ELECTRON TUBES & DEVICES CO., LTD.	19			51					100 101 115					
Canon Europe NV Medical Components Business Group Bovenkerkerweg 59 1185 XB Amstelveen, The Netherlands tel +31 205 45 89 26 medical.drsales@canon-europe.com www.canon-europe.com/medical	Canon						69			88 93 94 101 102 107 111 112 114					
Canon Medical Systems Europe B.V. Zilverstraat 1 2718 RP Zoetermeer, The Netherlands tel +31 79 368 92 22 eurmedical.canon	Canon	7 9 12 17 18	26 27		41 42 43 44	53	60	71		88 89 105 110 111 115				126 127	
Cefla s.c. Via Selice Provinciale 23A 40026 Imola (BO), Italy tel + 39 045 820 27 27 info@newtom.it www.newtom.it	Newton what's next	16													

		<ul> <li>Computed Tomography</li> </ul>	<ul> <li>Magnetic Resonance Imaging</li> </ul>	Injectors	Interventional Systems	<ul> <li>Artificial Intelligence</li> </ul>	IT Systems	Mammography	R/F Film-Screen	R/F Digital	Molecular Imaging	Displays	Printers	<ul> <li>Ultrasound</li> </ul>	Testing Devices
DinAmik RÖNTGEN 1371.sokak No: 21/b Y. Mahalle Ankara, Turkey tel +90 312 395 25 31 info@dynamicxray.com www.dynamicxray.com	*				45					89 105					
DK Medical Systems Co.,Ltd 18, Baumoe-ro 7-gil, Seocho-gu, Seoul, 06762, Korea tel +82 2 529 6190 global@dk.co.kr www.dk.co.kr	<b>DK</b> <sup>*</sup> Medical Systems				49					90					
DRGEM Corporation 77, E-B/D Gwangmyeong Techno-Park, 60 Haan-ro, Gwangmyeong-si, Gyeonggi-do, Korea tel +82 2 869 85 66 drgem@drgem.co.kr www.drgem.co.kr	DRGEM Your Best Healthcare								81	90 91 102 105 115 116					
Philips Medical Systems DMC GmbH Röntgenstr. 24 22335 Hamburg, Germany marketing-dunlee@philips.com www.dunlee.com	DUNLEE	19	32												
EXAMION GmbH Erich-Herion-Str. 37 70736 Fellbach, Germany tel + 49 711 12 00 02-0 vertrieb@examion.com www.examion.com	KRay Systems - Digital Imaging - Service						60		79 81	86 92 99 102 105 116					
Febromed GmbH & Co. KG Am Landhagen 52 59302 Oelde, Germany tel + 49 2522 9 20 19 00 info@febromed.de www.febromed.com	Debromed	20	34												
FUJIFILM Medical Systems Europe Heesenstr. 31 40549 Düsseldorf, Germany tel + 49 211 508 90 www.fujifilm.eu	FUJIFILM	13 15			46	53	60 62 63 64 68	71	81	92 102 105 106					
GCTechnology GmbH Freidling 12 84172 Buch am Erlbach, Germany tel +49 8706 94 15 00 info@gctech-gmbh.com www.gctech-gmbh.com	GCTechnology GmbH	20	34		51										
GLEAMER 117 Quai de Valmy 75010 Paris, France tel + 33 6 08 18 12 01 contact@gleamer.ai www.gleamer.ai	🧿 GLEAMER					54									
GMM GROUP Via Partigiani, 25 24068 Seriate (BG), Italy tel + 39 035 452 53 11 info@gmmspa.com www.gmmspa.com	GMM				46 49				79	92 93 106 111					
Guerbet BP 57400 95943 Roissy CdG Cedex, France tel +33 145 91 50 00 LF@guerbet.com www.guerbet.com	Guerbet   🏭			36 37 39			68								

		Computed Tomography	<ul> <li>Magnetic Resonance Imaging</li> </ul>	Injectors	Interventional Systems	<ul> <li>Artificial Intelligence</li> </ul>	IT Systems	Mammography	R/F Film-Screen	R/F Digital	Molecular Imaging	Displays	Printers	Ultrasound	<ul> <li>Testing Devices</li> </ul>
Hitachi Medical Systems Europe (Holding) AG Sumpfstr. 13 6300 Zug, Switzerland tel +41 41 748 63 33 welcome@hitachi-medical-systems.com www.hitachi-medical-systems.com	HITACHI Inspire the Next	9 13	27 31			54								127 128	
Hologic bvba Da Vincilaan 5, Building Caprese 1930 Zaventem, Belgium tel + 32 2711 46 80 EUInfo@hologic.com www.hologic.com	HOLOGIC					54	63 64	71 75 76 77		114				128	
I.A.E. S.P.A. Via Fabio Filzi, 53 20032 Cormano (MI), Italy tel +39 02 66 30 32 55 iaexray@iae.it www.iae.it		20			51			77	83	116					
IBA Dosimetry GmbH Bahnhofstr. 5 90592 Schwatzenbruck, Germany tel +49 9128 607- 0 salesdiagnostic@iba-group.com www.iba-dosimetry.com www.iba-dosimetry.de	ња dosimetry														135 136 137
iCAD, Inc. 98 Spit Brook Road Suite 100 Nashua, NH 03062, USA tel +1 603 882 5200 www.icadmed.com	iCAD					54									
IMAGE Information Systems Europe GmbH Lange Str. 16 18055 Rostock, Germany tel +49 381 496 58 20 info@image-systems.biz www.image-systems.biz							57 60 62 64 67					122			
IMS Giotto S.p.A. – GMM GROUP – Via Sagittario, 5 40037 Sasso Marconi (BO), Italy tel + 39 51 84 68 51 imscomm@imsgiotto.com www.imsgiotto.com	Kiotto							71 74 76							
INTERMEDICAL SRL Via E. Fermi, 26 24050 Grassobbio (BG), Italy tel + 39 035 659 48 11 info@inter-med.it www.inter-med.it	INTERMEDICAL				46 49				81	93 106					
i-SOLUTIONS Health GmbH Am Exerzierplatz 14 68167 Mannheim, Germany tel +49 621 39 28-0 info@i-solutions.de www.i-solutions.de	-SOLUTIONS						57 58 65 69								
JVCKENWOOD Deutschland GmbH Konrad-Adenauer-Allee 1 – 11 61118 Bad Vilbel, Germany tel + 49 2161 69 84-180 medical-display.e@jvckenwood.com healthcare.jvc.com	JVC											121 122			
Konica Minolta Business Solutions Europe GmbH Capellalaan 65 2132.U. Hoofddorp, The Netherlands healthcare@konicaminolta.eu www.konicaminolta.eu/healthcare							63			87 93 102 103 106			124	129	

		Computed Tomography	Magnetic Resonance Imaging	Injectors	Interventional Systems	Artificial Intelligence	IT Systems	Mammography	R/F Film-Screen	R/F Digital	Molecular Imaging	Displays	Printers	<ul> <li>Ultrasound</li> </ul>	Testing Devices
medavis GmbH Bannwaldallee 60 76135 Karlsruhe, Germany tel +49 721 929 10-0 info@medavis.de www.medavis.de	medavis 🔹						57 58 65								
mediaire GmbH Möckernstr, 63 10965 Berlin, Germany tel +49 30 28 64 90 67 info@mediaire.de www.mediaire.de	medi <mark>ai</mark> re					54									
medigration GmbH DrRudolf-Eberle-Str. 8 – 10 76534 Baden-Baden, Germany tel +49 7223 966 98 60 info@medigration.de www.medigration.de	bender gruppe medigration						57 61 64 65 67 69			103		123			
MEDTRON AG Hauptstr. 255 66128 Saarbrücken, Germany tel +49 681 970 17-0 info@medtron.com www.medtron.com	MED(TRON <sup>*</sup> AG			38											
Medtronic International Trading Sàrl Route du Molliau 31 1131 Tolochenaz, Switzerland tel +41 21 802 70 00 www.oarm.com www.medtronic.com	<b>Mecttronic</b> Further, Together				46										
SHENZHEN MINDRAY BIO-MEDICAL ELECTRONICS CO., LTD. Mindray Building, Keji 12th Road South Nanshan, Shenzhen 518057, China tel + 86 755 81 88 89 98 intl-market@mindray.com www.mindray.com	mindray					55				94 107				129 130 131	
NEXUS/CHILI GmbH Friedrich-Ebert-Str. 2 69221 Dossenheim / Heidelberg, Germany tel +49 6221 180 79 10 sales@nexus-chili.com www.nexus-chili.com	nexus   chili imaging & radiology solutions						57 61 62 63 65 66 67					123			
NORAS MRI products GmbH Leibnizstr. 4 97204 Höchberg, Germany tel +49 931 29 92 70 mri@noras.de www.noras.de			32 33												
NRT X-RAY A/S Birkegaardsvej 16 8361 Hasselager, Denmark tel +45 86 28 35 00 nrt@nrtxray.com www.nrtxray.com										94 111 112					
OR Technology Ochm und Rehbein GmbH Neptunallee 7c 18057 Rostock, Germany tel +49 381 36 60 06 00 info@or-technology.com www.or-technology.com	📟 OR Technology						61 66			87 94 99 103 107					
Planmed Oy Sorvaajankatu 7 00880 Helsinki, Finland tel + 358 20 779 53 00 sales@planmed.com www.planmed.com	Planmed	16						71 74 75							

		Computed Tomography	Magnetic Resonance Imaging	Injectors	Interventional Systems	Artificial Intelligence	IT Systems	Mammography	R/F Film-Screen	R/F Digital	Molecular Imaging	Displays	Printers	<ul> <li>Ultrasound</li> </ul>	Testing Devices
PTW Freiburg GmbH Lörracher Str. 7 79115 Freiburg, Germany tel +49 761 490 55-0 info@ptwdosimetry.com ptwdosimetry.com	PTW THE DOSIMETRY COMPANY	20						77	83	116					
QUART GmbH Kirchenweg 7 85604 Zorneding, Germany tel +49 8106 24 91 18 info@quart.de www.quart.de	CUQUART Builty Assesses in Reference in Victoriague														138 139
Radcal Corporation 426 West Duarte Road Monrovia, CA 91016, USA tel +1 626 357 79 21 sales@radcal.com www.radcal.com	Radcal														140
Roesys MedTec GmbH DrMax-IIgner-Str. 2 32339 Espelkamp, Germany tel +49 5772 915 55-0 info@roesys.de www.roesys.de	roesys								79 83	94 103					
RTI Group Flöjelbergsgatan 8C 43137 Mölndal, Sweden tel +46 31 746 36 27 sales@rtigroup.com www.rtigroup.com															140 141 142
ScreenPoint Medical Toernooiveld 300 6525 EC Nijmegen, The Netherlands tel +31 242 020 020 info@screenpointmed.com www.screenpoint-medical.com	SCREENPOINT Medical					55									
Shimadzu Europa GmbH Medical Systems Division Albert-Hahn-Str. 6 – 10 47269 Duisburg, Germany tel +49 203 76 87-0 medical@shimadzu.eu www.shimadzu-medical.eu	SHIMADZU Escalarca in Science				42 44 49				79 80 81 82	95 107 112					
Siemens Healthineers Headquarters Siemens Healthcare GmbH Henkestr. 127 91052 Erlangen, Germany tel +49 800 188 188 5 siemens.com/healthineers	SIEMENS Healthineers	7 12 15 17 18	26 27 30 31		41 42 44 45 46 47 49 51	55	58 60 61 62 63 64 69	74 75 76	82	95 96 107 112 113	118 119			132 133	
Solutions for tomorrow Saxagårdsvägen 5 36251 Väckelsäng, Sweden tel +46 10 456 45 00 info@solutionsfortomorrow.se www.solutionsfortomorrow.se	Solutions for tomorrow									107					
STEPHANIX 10, Rue Jean Moulin 42150 La Ricamarie, France tel +33 477 47 81 60 contact@stephanix.com www.stephanix.com					47				80 82	96 97 103 104 108 113 114					
SternMed GmbH Schubertstr. 31 88214 Ravensburg, Germany tel +49 751 35 97 80 email@sternmed.de www.sternmed.de	STERNMED <sup>®</sup> we make it possible	15	30 32		47 50			75	82	108					

		Computed Tomography	Magnetic Resonance Imaging	Injectors	Interventional Systems	<ul> <li>Artificial Intelligence</li> </ul>	IT Systems	Mammography	R/F Film-Screen	R/F Digital	Molecular Imaging	Displays	Printers	Ultrasound	Testing Devices
Swissray Technologies AG Turbistr. 25 6280 Hochdorf, Switzerland tel +41 41 914 12 12 info@swissray-technologies.com www.swissray-technologies.com	SWISSRAY D						66			97 98 104 108					
Technix S.p.A. Via Fermi 45 24050 Grassobbio (BG), Italy tel +39 035 384 66 11 technixd@technix.it www.technix.it	TECHNIX				47					109					
THERAPIXEL Le Village By CA, Rue Claude Daunesse 06560 Valbonne, France Phone: +33 9 72 55 20 39 contact @ therapixel.com www.therapixel.com						55									
Ultrasound Technologies LTD Lodge Way, Portskewett, Caldicot, South Wales, NP26 SPS, U.K. tel +44 12 91 42 54 25 ultratec@doppler.co.uk www.doppler.co.uk	ultrasound technologies	20													
VacuTec Meßtechnik GmbH Dornblüthstr. 14a 01277 Dresden, Germany tel +49 351 317 24-0 info@vacutec-gmbh.de www.vacutec-gmbh.de	I VACUTEC														142
Varex Imaging Deutschland AG Otto-Brenner-Str. 10 47877 Willich, Germany tel +49 2154 92 49 80 info@vareximaging.com www.vareximaging.com	WVAREX	21						77							
VILLA SISTEMI MEDICALI s.p.a. Via delle Azalee, 3 20090 Buccinasco (MI), Italy tel + 39 02 48 85 91 sales@villasm.com www.villasm.com	VILLA				50			74 75 76	80 81 82 83	98 99 104 109 110 114					
Ziehm Imaging GmbH Lina-Ammon-Str. 10 90471 Nürnberg, Germany tel +49 911 21 72 - 0 info@ziehm.com www.ziehm.com	🛞 ziehm imaging				48 50										

Notes	



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At Hologic, we are committed to advancing the Breast Continuum of Care, ensuring that every solution, from screening to monitoring, supports excellence in disease management all along the patient pathway.

To learn more about how Hologic is defining the future of women's health with its Breast Continuum of Care visit: **3dimensionsmammography.eu/advancingbreastcare** 



Hologic, your Trusted Breast and Skeletal Health Partner.

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