

Konica Minolta's AeroDR is a highly versatile, cassette sized, wireless DR detector featuring high DQE, high durability and low power consumption while at the same time maintaining a very low weight and easy operability. > page 80 www.shimadzu.eu medical@shimadzu.eu

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Phone +49 - 203 - 7687-0 Fax +49 - 203 - 7687680



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- Outstanding image quality achieved particularly by "Direct-conversion" FPD
- High-speed response and various applications ensured by latest digital technology
- Fast, easy and precise C-Arm positioning up to 60 degrees per second
- Advanced dose management ensuring safety of patients and operators.



BRANSIST safire - outstanding image quality

www.shimadzu.eu



Who is Carestream?

We are a global company of passionate professionals dedicated to the cause of healthcare. We use our extensive experience, insights and innovative medical imaging and healthcare IT solutions and services to improve outcomes, lower costs, simplify the work for healthcare professionals, and give you exactly what you need... a smarter way forward.

OPEN.

Healthcare IT is rapidly evolving around Electronic Medical Records and integrated community-wide systems. Done right it will accelerate the sharing of vital information and drive better outcomes. There is no acceptable alternative. So how do you do it right? Start with a partner who can put it all together for you. When you sit at a CARESTREAM RIS+PACS workstation, you know right away that we get it. After all, for more than 100 years we've been helping radiologists spend significantly less time on the technology and considerably more time on the critical tasks of capturing, reading and reporting. When it comes to integration, we go beyond open and DICOM. We are vendor- format- and source-neutral, for easy connectivity. We have successfully transformed some of the world's largest multi-site, multi-vendor PACS environments into a single-view global workflow. Want to leave the IT to us? Carestream e-Health Services puts your IT in our secure cloud. No matter where you are today, when you look at it from our perspective, it's easy to see your next move.



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A SMARTER WAY FORWARD.

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Management

 j		
RIS	Small Business PACS	Enterprise PACS
IMPAX ORBIS	SE	IMPAX
	CHILI PACS XS	CHILI PACS
e-ris	Teamwork	Teamwork
	SYNAPSE	SYNAPSE Synapse 3D
Centricity RIS	Centricity PACS	Centricity PACS
GEMED-RIS	GEMED-PACS	GEMED-PACS
iQ-RIS	iQ-WEBX	iQ-SYSTEM PACS
iSOFT Radiology	iSOFT Radiology Fusion	iSOFT Radiology Fusion
Hyper.RIS	Hyper.ePACS	Hyper.PACS
	Acies ImagePilot	Acies
medavis RIS	medavis PACS	
	ImageBroker	ImageBroker
	dicomPACS	dicomPACS
XIRIS	iSite PACS	iSite PACS
	PROPAXX	PROPAXX
	Sectra PACS	Sectra PACS
<i>syngo</i> Workflow	syngo.plaza	syngo.plaza
	e-pacs	e-pacs
Visage RIS	Visage 7	Visage 7
3rd party	JiveX Radiology Basic	JiveX Enterprise

Archiving

Image Distribution

Cardiology PACS	Long Term	Multimedia	Inhouse	Teleradiology	Portal Solution	Cloud Computing Application
IMPAX	IMPAX Data Center	IMPAX Data Center	IMPAX			
CHILI PACS	CHILI PACS	CHILI PACS	CHILI/Web	Teleradiologie Gateway ONE Teleradiologie Gateway Teleradiologie HUB	Telemedizinakte mit CHILI/Web	OmniPACS
Teamwork	Teamwork Telepaxx e-pacs option	Teamwork	WebPortal	WebPortal	WebPortal	
SYNAPSE Cardiovascular	SYNAPSE SYNAPSE Cardiovascular SYNAPSE 3D	SYNAPSE SYNAPSE Cardiovascular SYNAPSE 3D	SYNAPSE SYNAPSE Cardiovascular	SYNAPSE	SYNAPSE	
Centricity Cardiology				Centricity Connect	Centricity Portal	Centricity Enterprise Archive
GEMED-Cardio-PACS	GEMED-PACS Universalarchiv	GEMED-PACS Universalarchiv	GEMED-PACS	GEMED-PACS Communicator	GEMED-PACS Communicator	
	iQ-ROBOT PREMIUM		iQ-WEBX	iQ-WEBX	iQ-WEBX	iQ-WEBX
			iSOFT Portal	iSOFT Portal	iSOFT Portal	
Hyper.PACS	Hyper.ARC	Hyper.PACS Hyper.WEB	Hyper.WEB	Hyper.TELEMED Hyper.COM	Hyper.TELEMED Hyper.COM Hyper.WEB	Hyper.PACS Hyper.WEB
	Acies ImagePilot	Acies ImagePilot	Acies ImagePilot	Acies ImagePilot		
				portal4med	portal4med	
ImageBroker	ImageBroker	ImageBroker	ImageWeb	webConnect	ImageWeb Zuweiserportal	
dicomPACS	dicomPACS	dicomPACS	dicomPACS	dicomPACS	dicomPACS	
Xcelera	iSite PACS	iSite PACS	iSite Enterprise	iSite Enterprise	iSite Portal	n. a.
	PROPAXX		PROPAXX			
Sectra PACS	Sectra PACS	Sectra PACS	Sectra PACS	Sectra PACS		
<i>syngo</i> Dynamics	syngo.plaza	AIM	syngo.plaza	syngo.plaza syngo.via	syngo Portal Radiologist syngo Portal Transcriptionist syngo Portal Referring Physician syngo Portal Executive	syngo CXR CAD Subscription
e-pacs	e-pacs Archiving as a Service for archive outsourcing, e-pacs Dicom Appliance for inhouse archiving	e-pacs				
Visage 7	Visage 7	Visage 7	Visage 7	Visage 7	Visage 7	Visage 7
JiveX Cardiology	JiveX Archive Manager JiveX Storage Service for PACS (SSP)	JiveX DICOM Platform	JiveX Review JiveX Review Web	JiveX Telemedicine	JiveX Review Web	JiveX Application Service for PACS (ASP)
			Vitrea Core	Vitrea Core 2D/3D/4D		Vitrea Enterprise Suite fully virtualized Thin Client Server Technology



Dear Reader,

Since the turn of the millennium imaging technology has been advancing at a breathtaking speed. Today's state-of-the-art IT solutions have little in common with first generation RIS and PACS.

Integrated RIS and PACS are not yet implemented throughout the healthcare landscape, while cloud computing is already whipping up a storm – and the IT world outside radiology is even already abuzz about a more personalized second generation cloud.

The term cloud points at the idea that data processing is no longer "within reach" of the user but takes place in a somewhat nebulous network. Cloud computing utilizes abstracted IT infrastructures – computer capacity, memories, even complete applications – dynamically in a network.

For healthcare facilities this concept implies that they can return to their core competencies. Instead of having to acquire expensive hardware and network structure for long-term archiving



they simply pay for a web service offered by an external provider. Despite the immense charm of this idea, there is one very real danger: the healthcare facilities lose the control over their own data. Therefore it is crucial that cloudbased services offer sophisticated privacy solutions. To be on the safe side, clients should look for certified providers.

Imprint

See you at www.radbook.eu

Daniela Zimmermann Guido Gebhardt

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Editorial	3
COMPUTED TOMOGRAPHY	5
Prime Time	6
Sharp teeth at low dose	16
MAGNETIC RESONANCE IMAGING	20
INJECTORS	
INTERVENTIONAL SYSTEMS	
IT SOLUTIONS	
Radiology Workflow in the Cloud	50
A Tender Point	5C
MAMMOGRAPHY	54
The Use of Breast Tomosynthesis in Clinical Practice	56
R/F SYSTEMS	65
COMPUTED & DIGITAL RADIOLOGY	
Real Flexibility in general X-Ray	80
MOLECULAR IMAGING	
DISPLAYS / PRINTERS	
ULTRASOUND	
Index of advertisers	
Companies & Suppliers	136



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COMPUTED TOMOGRAPHY

oshiba Medical Systems introduces the Aquilion Prime CT scanner, the latest member of the CT family Volume CT Aquilion ONE. Equipped with cutting edge technology for dose reduction and a gantry bore of 78cm, the innovative 160 multislice CT Aquilion Prime defines the next generation of CT scanners.

Patients benefit from low exposure dose

The key word for dose reduction is AIDR – adaptive iterative dose reduction. This is facilitated by a completely new iterative reconstruction algorithm: AIDR reduces the dose by up to 75%. Additionally, image noise can be reduced by up to 50%, which visibly increases image quality and therefore eases clinical evaluation.

A further dose reduction by 20% is achieved through active collimation: With helical scans, the first half of the first rotation as well as the second half of the last rotation do no contribute towards image reconstruction for technical reasons. In both cases, active collimation blocks out the X-ray beam and thereby prevents exposure that is not used for diagnosis.

The user can therefore be assured that the Aquilion Prime delivers maximum image quality with minimal exposure for patients. New 160 slice Toshiba CT Aquilion Prime speeds up workflow and reduces exposure dose

Prime Time

Trauma scans and CT scans of obese patients made easier

Being comfortable during the examination is becoming increasingly important for patients. They appreciate large gantry bores and short examination times. And when it comes to patient comfort, the Aquilion Prime is also superior to previous CT scanners in this respect. The gantry bore measures 78cm - an additional 60mm for more freedom of movement. Both trauma patients and doctors benefit from the large eVolution gantry during image guided interventions. Moreover, a table capacity of 300kg combined with the large gantry diameter makes the Aquilion Prime the optimal examination platform for obese patients.

The Aquilion Prime: More room for patient and doctor thanks to 78cm gantry bore

6





Earlier diagnosis – faster treatment

Patients benefit from the extremely short examination times of the new 160 slice scanner for instance as they do not have to hold their breath for too long. 160 slices of 0.5mm are reconstructed per rotation, which only takes 350 milliseconds each. The high speed reconstruction with up to 50 frames per second ensures that the images are ready for evaluation at the earliest possible time. The high scanning speed of up to 16cm per second (with a full 50cm field of view) is of particular benefit to traumatised patients as they do not have to hold their breath for too long. Images are available for diagnosis earlier and treatment can begin sooner. Additionally, the high scanning speed reduces motion blur, which cuts down on the amount of contrast media required.

The technology used with the Aquilion Prime not only allows the acquisition of high quality images with low exposure dose but also an optimisation of the workflow and a significant reduction in the time required to establish the diagnosis. Reviewing and discussing CT images from everywhere in the hospital – no loose of performance or speed

Clinical added value beyond routine

The performance of the Aquilion Prime ranges from the complete spectrum of radiological routine examinations to particularly dose-saving cardio- and neuro CT scans as well as dual energy scans. Just like the Toshiba high-end volume CT scanner Aquilion One, the Aquilion Prime also scans high resolution dynamic volumes such as those required for enhanced diagnosis of organ perfusion for instance.

Sure Extension seamless access to CT images in the hospital

Sure Extension, Toshiba's new technology used for the Aquilion Prime, offers users new flexibility: they can access the CT display console via the hospital network and handle CT data and applications.

This means that the CT data can be accessed from consultation or meeting room to discuss the results of a CT examination with patients or colleagues. Even MPR, 3D and CT options such as those used for vascular analysis or cardiac diagnostics can be simultaneously utilised at the CT scanner as well as via remote access – the performance and speed remain just the same.

▶ GE Discovery CT750 HD Veo Discovery CT750 HD Spectral Imaging Views/s > 7.000 Temporal resolution: Dose under 1mSv Power (kW) Spatial resolution 150 0.5 ms Resolution 230 microns Monochromatic energies improved by up to 50% 40 to 140 keV LCD improved by up to 75% 6 Highlights - World's 1st High Definition CT - New dimensions with Gemstone Highlights Highlights Spectral imaging – Introducing Veo - World' s 1st model based iterative reconstruction - Iterative modeling – 15 clinical applications system optics - Full 50 cm FOV in - Advanced computation - Proven dose reduction across the body Spectral Imaging platform with integrated ASiR reconstruction - Single tube ultrafast Împroved Low Contrast Low/High kVp - Up to 500 slices for 4D CTA & Detectability by up to 75% perfusion studies 230 micron resolution across the whole body switching Improved resolution - Gemstone ultrafast detecby up to 50%

- Monochromatic images & Metal artefact

64 or 128

72 or 120

40 mm isotropic

per 0.4 s (cardiac 0.35 s)

▶ GE Optima CT660

reduction

Channels

Coverage

Power (kW)

Rotation (mm)

CT

tor with $0.3 \,\mu sec$ primary Allows to scan under 1mSv, speed in routine ▶ GE BrightSpeed Series **BS 16** BS 16 Elite **BS 8 BS 4** Channels 16 From 16 to 4 16 8 53.2 Power (kW) 42 42 42 16 x 0.625 16 x 0.625 2 x 0.625 2 x 0.625 Coverage or 4 x 1.25 or 16 x 1.25 or 16 x 1.25 or 8 x 1.25 or 8 x 2.5 or 4 x 2.5 or 4 x 5 Rotation (mm) mm per 0.5 s mm per 0.8 s mm per 0.8 s mm per 0.8 s

Highlights

exposure

breath-hold

– ASIR for Lower Dose & improvement

at a very low radiation

BS 8: any organ in a

on Image Quality (on 16sl) BS 16 Elite: Speed & co-

verage with high resolution

– BS 16: Sub-mm microvoxels for incredible detail

Highlights

- 64 and 128 slices
- imaging

RAD-BOOK 2011

- Leadership in Advanced Cardiac CT
- Up to 40% dose reduction across the body
- Up to 500 slices coverage for perfusion 60% lower CO2 emission & energy saving
- Scalable and modular
- Compact for easy siting (18 sqm)

 Integrated ASiR reconstruction Latest innovations in a 40 mm detector CT 			 BS 4: perform long coverage and high grade CT-A 	
► GE Di	scovery CT590 RT	& GE Optima CT580 Series		▶ GE Br
Channels Power (kW) Coverage	Discovery 590 RT 16 100 16 x 0.625 or 16 x 1 25	Optima 580 Series 8 or 16 55 or 100 8 x 1.25 or 16 x 1.625	Channels Power (kW) Coverage Rotation (mm)	2 24 from 2 x 0.6 mm per second
Rotation (mm)	0.5 s	or 16 x 1.25 0.8 or 0.5 s	-	
 Highlight 8/16 slice Wide Bor GE Micro Biopsy & Obese pa All tables Up to 40^o ASiR reco Respirato 4D gating 	ts es imaging systems e geometry (CT580 Voxel technology interventional moo tient capability up to TG66 compliant (% dose reduction a postruction ry gating solutions reconstruction on	W) es o 295 kg 225 and 295 kg max) cross the body with Integrated with RPM camera and ANZAI belt the operator console	 Highlights Multi-slice s New Ultrac 	scanning for every

- Complete and ease to use RT simulation planning solution with AD Sim



<u>ст</u> д Hitachi Medical Systems ECLOS 4/8/16 ▶ Hitachi SCENARIA 64ch Multislice CT 4/8/16 Slices Slices 64 Power in kW Power in kW 42 72 Coverage/rot Coverage/rotation 40 ation in mm in mm Highlights -X-ray tube: 7.5 MHU Highlights - Minimum scan time: 0.35 seconds -X-ray tube: 3.5 to 5.0 MHU - Minimum slice thickness: 0.625 mm - Sub-second, real-time image reconstruction - Open design concept. Diameter of aperture: 750 mm - First 64ch CT system, equipped with a 2-dimensional - Minimum scan time 0.8 sec and maximum anti-scattered x-ray collimator field of view 500 mm

- Touch vision control panel
 - Wide table. Width: 475 mm

NeuroLogica BodyTom Portable CT-Scanner Highlights – 32 Slice x 1,25 mm = 4 cm of coverage -KV Range 80-140 kV at 300 mA - Focal Spot Sice 1,2 mm x 1,4 mm -85 cm gantry -60 cm FOV Scout Scanning
 DICOM 3.1 with Modality Worklist - Internal lead shielding - compatible with all Surgical Navigations -Weight 1270 kg, L 223 cm x W 91cm x H 202 cm

- Preventive examination supported by fatPointer or riskPointer

- Straight forward patient registration and easy system handling

- Advanced Visualization Software Package
- 2D, 3D and MPR tools
- dose display prior to scan



- Patient-specific acquisition protocols to balance image quality
- and dose utility - Revolutionary AirGlide Gantry for whisper-quiet performance
- at 220 rpms Exclusive dose-saving features like the Eclipse Collimator, Step
- & Shoot Cardiac and Dedicated Pediatric Protocols
- Life-cycle benefits through a scalable hardware and software platform





- Philips MRC Ice X-ray tube

















Aquilion Prime 160 slices/rotation

Your patients profit from

- the 78 cm gantry aperture
- the iterative dose reduction up to 75%*
- the ultra-short examination

You profit from

- the new Dual-Energy mode with 50 cm FOV
- the Body Perfusion with 20 volumes/s
- the ultra-short reconstruction times from up to 50 images/s
- the Flexibility: data access via VPN

High-End-Technology with 160 slices

- active collimation to further reduce dose
- scan with up to 160 mm/s
- ultra-fast rotation-speed: 0,35 s/rotation for shorter acquisition times*

*in comparison with conventional CT-imaging



www.toshiba-medical.de www.toshiba-medical.at www.toshiba-medical.ch

<u>רד גן כד</u>

Siemens SOMATOM Definition AS

Channels Power in kW Coverage Resolution

40 slices 20 slices 80 kW up to 80 mm (with A4DS) 0.24 mm³ (for 40 slice config)



 Maximize Outcome. Minimize Dose.

Highlights

- Single Click Readiness with direct scan parameter
- adjustment – Shields over-radiation in every spiral scan, additionally reducing the dose
- Raw-data based IR allows for up to 60% dose reduction or superior image quality
- Allows dynamic studies with up to 8 cm coverage





 Savings in every scan with the smallest space required for installation and lowest power and air-conditioning requirements
 * Expected summer 2011



- Available as sliding gantry for trauma and inter-operative

 Savings in every scan with the smallest space required for installation and lowest power and air-conditioning requirements
 *Expected summer 2011



- New dimension in patient-friendliness

installations

CT

▶ Toshiba AQUILION ONE

640 Slices Coverage/rotation 160 mm Rotation speed 0,35 s



Highlights

- Worlds first Dynamic Volume CT
- Adaptive Iterative Dose Reduction and Active Collimator
- Cardiac Sub mSv, irregular beat and perfusion scanning*
- Complete organ coverage without table movement
- Isophasic dynamic organ scans at superior temporal resolution (20 vol/s)

- CT DSA runs of dynamic scans
 Dual Energy at 50 cm Field of View*
 UltraHelical, fast scanning with outstanding quality*
- 300 kg patient load table with lateral movement*
- SUREXtension, remote access for instant reporting*
- -0,5 mm detector technology with best low contrast resolution 2 mm @ 3HU
- Hybrid gantry with energy regeneration
- *option

▶ Toshiba AQUILION Premium

Slices 320 - upgradeable to 640 slices Coverage/rotation 80 mm Rotation speed 0,35 s

- Highlights
- Dynamic volume CT - Adaptive Iterative Dose Reduction and Active Collimator
- Cardiac volume imaging*
- Isophasic dynamic volume scans at superior temporal resolution (20 vol/s) - CT DSA runs of dynamic scans

- CT DSA fully of dynamic scalis
 Dual Energy with 50 cm Field of View*
 UltraHelical, fast scanning with outstanding quality*
 300 kg patient load table with lateral movement*
 SUREXtension, remote access for instant reporting*
 0.5 mm dataset scales access for instant reporting*

- -0,5 mm detector technology with best low contrast resolution
- 2 mm @ 3HU
- Hybrid gantry with energy regeneration *option

Toshiba AQUILION PRIME 160 Slices 40 mm Coverage/rotation Rotation speed 0.35 s Highlights Dynamic volume CT with 78 cm bore
 Adaptive Iterative Dose Reduction and Active Collimator Low dose Helical Cardiac Prospective scanning
 CT DSA with ^{SURE}Subtraction*
 Dual Energy with 50 cm Field of View*
 Fast helical scanning with outstanding quality*
 Up to 50 images/s reconstruction* - 300 kg patient load table with lateral movement* -0,5 mm detector technology with best low contrast resolution 2 mm @ 3HU

- Hybrid gantry with energy regeneration
- *option

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*option

2 mm @ 3HU *option



-0,5 mm detector technology with best low contrast resolution 2 mm @ 3HU

*option

- -0,5 mm detector technology with best low contrast resolution
- Reduced energy consumption *option

Toshiba Activion 16 Slices 16 2,0 cm Coverage/rotation Rotation speed 0,75 s Highlights - CT DSA with Sure Subtraction (option) - Powerful 3D software with auto bone removal Please see us at ECR, - 0,35 mm isotropic spatial resolution - Easy "Ready-Set-Go" user concept - Ultra low dose scanning first level, booth 635 - Real time multislice fluoroscopy -0,5 mm detector technology with best low contrast resolution 2 mm @ 3HU

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Now there's CT technology that doesn't force you to make tradeoffs: the Philips Ingenuity CT. Thanks to Philips Imaging 2.0, a completely new approach to imaging technology, the Ingenuity CT allows for high-quality images and faster scan times – all at a lower dose. You get crystal clear images that increase diagnostic confidence. And more importantly, your patients get a PHILIPS CT scan that accommodates their needs. Discover CT technology that lets sense and simplicity

DIGITAL VOLUME TOMOGRAPHY RAD-BOOK 2011

Sharp teeth at low dose

oday, digital volume tomography (DVT) originally developed for ENT and dental medicine applications, is a high performance modality. Compared to a conventional CT scan a DVT scan offers better image quality at lower dose. Markus Hoppe, managing director of SCS, a solutions provider based in southern Germany, wants more patients to be able to benefit from this technology and thus offers radiologists a complete DVT service package. Guido Gebhardt reports.

What do you intend to achieve with the DVT service package?

With our DVT service package we want to enable radiologists to produce high quality ENT and dental images for their referring physicians. Dentists as well as ENT specialists rely on digital volume tomography. They appreciate the fact that good DVT systems generate high resolution images at low dose. But unfortunately good systems are not always used. Therefore we want to support the radiologists diagnostic competence with DVT.

Our service concept helps radiologists to strengthen and expand their current referral structures with ENT specialists and dentists. We do not want to sell individual systems; we rather offer different service models which can include setting up and operating the entire infrastructure from scheduling to performing the examinations down to digital image distribution and archiving.

Where to you see the major challenges with regard to the implementation of your concept?

The concept addresses different questions that hardly any manufacturer can solve all by himself. Mere hardware does not yet constitute a solution. Radiolo-



gists need to communicate in a specific way with referring physicians to let them know that an entirely new service is being offered. Establishing investment pools is also about communication with physicians and investors. Unlike radiologists ENT specialists and dentists are not necessarily aficionados of high-end CT systems. They tend to consider a high quality and low dose DVT a solution to their issues. And those ENT specialists and dentists who have had some firsthand experience with the image quality of a premium DVT solution don't want to work with anything else anymore. With digital volume tomography radiologists can close the diagnostics gap that has developed over the past few years.



What does the DVT service package offered by SCS comprise?

We build bridges. We have been working with dentists for many years and know the problems referring physicians face. Our task is to enable radiologists, dentists and ENT specialists to cooperate efficiently. We provide objective information with the aim to use the new modality to capacity. We are not looking for a medium-term but a long-term way to anchor this concept, no matter whether we are talking about a sole operator or n operating consortium.

Standard models are a thing of the past since today radiologists operate in a wide variety of contexts. We analyze the current situation and look for solutions that benefit everyone. Whatever works in Berlin does not necessarily work in Munich. Moreover we are not bound to the systems of one manufacturer. We aim to offer quality-assured tailor-made solutions that improve diagnostic outcomes. www.mydvt.net

We link radiologists, ENT specialists and dentists via www.mydvt.net. SCS takes care of the entire process from scheduling appointments down to image and report management.

DIGITAL VOLUME TOMOGRAPHY

SCS – Accuitomo Med Series – H17

Voxelsize Scan time Scan Volumina

80 µm 18 s Ø 40 x H40 mm, Ø 60 x H60 mm, Ø 80 x H80 mm, Ø 100 x H100 mm, Ø 170 x H120 mm



- Highlights - Offers high definition 3D-CT images with low patient dose
- Displays both hard and soft
- tissue
- A wide dynamic range and precise grayscale differentiation capability
- Enables comprehensive examination for diagnosing temporal bone, paranasal sinuses, mandible, skull base, etc. - Compact Floor space: 1,620 mm X 1,200 mm



- Single 210/360 degree rotation
- Scan time 18 26 s
- Exposure time 2.4 18 s depending on image size and resolution mode



Highlights

- Direct deposit CsI coated CMOS Flat
- panel sensor capable for 30 frames/sec image read out

Ø 160 x 50 mm Ø 160 x 90 mm Ø 160 x 160 mm

- Sensor active area 13 x 13 cm, 1024 x 1024 pixels, sensor pixel size 127 µm
- 15 bit dynamic range, 32768 gray values
- Single 200/360 degree rotation
- Scan time 18 26 s Exposure time 2.4 18 s depending on
- image size and resolution mode Exposure time 12 s in High Resolution and Normal modes and
- 2.8 s in Low Dose mode



Resolution 0.4, 0.2 mm (0.1 mm high res mode) Scan Time 20 s KV-Range





- Highlights
- Cone Beam CT (CBCT) scanner dedicated to extremity imaging
- High quality 3D imaging with low dose
- Compact, mobile, easy to site
- Motorized, soft-surface gantry adapts to the patient
- TearDrop shaped bore with target specific positioning system

> Alliance Medical – flexible diagnostic imaging services

- Optional weight-bearing CT

CT ACCESSORIES



Highlights

- Table top as well as rails at head end and beside the lying
- surface are made of carbon fiber for excellent usage of c-arms. Height adjustment, Trendelenburg positioning, lateral tilt as well as table top sliding by hand switch or operating panel at the column
- Longitudinal as well as transversal slide of table top additionally by joystick
- All adjustments work electro-hydraulically
- Supports patients weight up to 250 kg in each position



Highlights

- Static diagnostic imaging centers MRI, CT, PET, PET/CT
- Interim services for bridging downtimes
- Regular "routing" services

CT ACCESSORIES





Highlights

- Designed according to IEC 61674
- For use with solid state detectors or ionization chambers
- For CDTI determination in
- combination with head and body phantom

Complete measuring kit for CTDI measurements at all types of



Highlights

- For conventional and additional for
- pediatric CTDI measurements
- For high precise measurements with DCT-10-RS CT chamber



The CT Dose Profiler is designed to make CTDI measurement more exact and has also the ability to further analyze the result. Following parameters are achived from a single exposure: CTDI100, CTDIvol, DCTIw, CT dose profile, DLP, Point Dose, Performance of the AEC, FWHM and Scatter Index. MARI Highlights - All in One Shot - Quick and Simple Set up - Accurate and Sensitive - No limitations due to the beam width

CT ACCESSORIES



Highlights

- Engineering, rental, sale of modular buildings MRI, CT, PET, PET/CT including or excluding diagnostic equipment



- adjustment of over pressure and faster resorption
- Easy setting of gas volume and pressure
- Display of gas consumption
- Four adjustable flow rates

▶ Vital Images Vitrea Enterprise Suite

Vitrea Enterprise Suite is Vital Images' premier package of advanced visualization tools, clinical applications, and data management systems.



Highlights

- Automatic insufflation of CO_2 into the colon for
- virtual colonoscopy examinations in CT - Significant improvement of
- diagnostic results compared to manual room air insufflation – Increase of patient comfort due to automatic
- adjustment of over pressure and faster resorption
- Easy setting of gas volume and pressure
- Display of gas consumption
 Four adjustable flow rates

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Brilliant new future ahead.

SCENARIA 64ch Brilliance in modern volume CT

Your patients experience inspired technology wrapped in an airy environment that provides extraordinary comfort.

You view brilliant clinical images from Hitachi's ultra-high-speed, whole-body scanner, even at low dosages.

Visit the CT imaging trendsetter at www.hitachi-medical-systems.com

HITACHI Inspire the Next

20 MAGNETIC RESONANCE IMAGING

RAD-BOOK 2011



MRI





- MRI unit for weight bearing musculoskeletal examinations Open permanent magnet design
- Tilting magnet mechanism 0° 90°
- Weight bearing examinations of lumbar spine, knee and foot
- Functional MRI of the cervical spine in seated patient
- positioning



Highlights

- New generation of dedicated MRI for MSK applications
- Excellent MRI capabilities, wide FOV, enhanced productivity,
- full connectivity and superior cost-effectiveness
- Its unique design and ergonomy provides optimal patient comfort and eliminates claustrophobic reactions



- Discovery is a trademark of General Electric Company. The MR750w cannot be put into service until it has been made to comply with CE marking. It may not be available in all regions, 510(k) pending at PDA. Not available for sale in the USA.
 The GEM coil suite available on MR450w and MR750w cannot be put into service until it has been made to comply with CE marking. It may not be available in all regions, 510(k) pending at FDA. Not available for sale in the USA.



22 MRI





Optima is a trademark of General Electric Company. The HDxt Optima Edition software option cannot be put into service until it has been made to comply with CE marking. It may not be available in all regions.



- Broad range of high density coils for all applications
 Exclusive HD applications

- Consumes 41% less energy than previous generation systems, GE »ecomagination« certified



RAD-BOOK 2011.



MAGLIFE Serenity

PERFECTION IN MRI MONITORING – SAFE, USER-FRIENDLY, MOBILE

The MAGLIFE Serenity provides the guarantee for highest safety:

For years, SCHILLER has been one of the world's leading suppliers of MRI-compatible patient monitoring systems. The new MAGLIFE Serenity guarantees highest ECG quality during magnetic resonance imaging (MRI) scanning – even under strongest gradient influence. It monitors all vit parameters during anaesthesia in an MRI environment.



SCHILL

The Art of Diagnostics

FR

Headquarters: SCHILLER AG, Altgasse 68, CH-6341 Baar, Switzerland, Phone +41 41 766 42 42, Fax +41 41 761 08 80, sales@schiller.ch, www.schiller.ch

24 <u>MRI</u>





- Allows newly developed technologies available at an excellent cost of ownership
- High magnetic field homogeneity

0.4 T

25 mT/m

55 T/m/s

- Environment friendly: extremely low power consumption and reduced installation requirements
- Reduced running costs allowing fast return of investment



- Allows newly developed technologies available at an excellent cost of ownership
- High magnetic field homogeneity
- Environment friendly: extremely low power consumption and reduced installation requirements
- Reduced running costs allowing fast return of investment



Highlights

Field

Gradient

Slewrate

- Wide, 320 degrees open permanent MRI system
- Features top field strength 0.4T amongst the permanent MRI systems presently on the market.
- Newly developed built-in technologies keep Aperto Lucent delivering image quality comparable with entry level HF MRI scanner
- Fast processing chain allows increasing patient throughput - Reduced running costs allowing fast return of investment

MRI





- Maximum gradient field intensity
 4D magnetic field uniformity technology
- Mindray EcZero Eddy compensation technology
- Comprehensive software packages and intervention software package
- Achieve part of high field functions



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Besuchen Sie uns unter: www.medicor.biz

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26 <u>MRI</u>







MRI



Philips Panorama MR HFO Oncology Configuration

Philips Panorama MR HFO Oncology Configuration Imaging that fits your planning



Highlights

- Imaging in treatment position enabled by the open spacious design of the system
- Streamlined clinical workflow with MR images customized for Radiation Therapy planning – Quality assurance for geometric deformation



Not available in the U.S.A.



20 <u>MRI</u>







<u>MRI</u> און





 Pink Workflow - Comprehensive tools that support the continuum of breast care



Excellent Return-On-Investment: Decreased costs - optimized profitability











- Complete function, Excellent images,
- Fully performed scanning sequences
- Quick scan image is much clearer with high slew rate
- Extremely low power consumption and very low failure rate

MRI ACCESSORIES

medifa MRT5600 II – mobile imaging operating tables



movable 2340 x 500 or 600 mm line or hattery 1.0 mm/100 kv



Highlights

- Table top as well as rails at head end and beside the lying
- surface are made of carbon fiber for excellent usage of c-arms. Height adjustment, Trendelenburg positioning, lateral tilt as well as table top sliding by hand switch or operating panel at the column
- Longitudinal as well as transversal slide of table top additionally by joystick
- All adjustments work electro-hydraulically
- Supports patients weight up to 250 kg in each position

▶ Alliance Medical – flexible diagnostic imaging services



Highlights

- Static diagnostic imaging centers MRI, CT, PET, PET/CT
- Interim services for bridging downtimes
- Regular "routing" services



We image-enable Regional Care.

Where? In Utopia?

Well, not in Utopia, but all over the world we actually live in. We call it regional health imaging - market-proven image and information management systems that implement multi-site integration up to the regional level. Consolidating radiology, cardiology, nuclear medicine ... any department that produces images - so that you can stay ahead of hospital and governmental requirements for sharing data and infrastructure. We offer a complete, configurable, single-source solution that helps standardize disparate IT infrastructures and consolidate patient records. Optimizing clinical resources, workflow and load balancing, reducing waiting times, and, ultimately, saving costs. To everyone's benefit. So, even though Utopia is not yet on our list, our integrated regional health program has your current world covered.

We invite you to visit our booth at ECR 2011 for a demo! **EXPO A: BOOTH # 103** www.agfahealthcare.com/ecr2011





<u> 32 MRI ACCESSORIES</u>

Hologic Sentinelle Breast MRI Coils



Highlights

- Innovative Sentinelle breast MRI coils offer unique features not available in traditional tabletop coils.
- The Sentinelle Breast MR auxiliary table provides complete and open access for intervention and award winning design for optimal patient comfort and workflow.

Hologic Aegis 4D Advanced Visualization and Interventional Computer Software



Highlights

- Sentinelle's powerful Aegis 4D (3D plus time) software aids in the guidance of biopsy procedures and gives the radiologist a new level of control to analyze and manipulate images.
- Aegis is available in both a standalone workstation and in a
 - zero footprint Web solution.





Highlights

 Engineering, rental, sale of modular buildings MRI, CT, PET, PET/CT including or excluding diagnostic equipment

Vital Images Vitrea Enterprise Suit

Vitrea Enterprise Suite is Vital Images premier package of advanced visualization tools, clinical applications, and data management systems.



Highlights

- Automatic insufflation of CO₂ into the colon for
- virtual colonoscopy examinations in CT
- Significant improvement of diagnostic results compared to manual room air insufflation
- Increase of patient comfort due to automatic adjustment of over pressure and faster resorption
- -Easy setting of gas volume and pressure
- Display of gas consumption
- Four adjustable flow rates



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Acist EmpowerMR

Syringe Volume | 1 Pressure | 4 Flow rate | 0.

a 1 - 100 ml in user-specified increments of 1 ml
 b 40 - 300 psi in user-specified increments of 1 psi
 c 0.1 - 10 ml/sec in increments of 0.1 ml/sec



- Highlights
- 7 T tested, no minimum distance requirement from magnet
- Hydraulic technology no motor, no battery in the MR suite
- No interference with magnetic field,
- no magnetic attractive force
- Double-barrel injector, floor stand mounted
- Ease-of-operation through intuitive operators interface
- distributed by TOMOVATION GmbH

Acist EmpowerCTA

Syringe Volume1 - 200 ml in
user-specified
increments of 1 mlPressure40 - 300 psi in
user-specified
increments of 1 psi
0.1 - 10 ml/sec in
increments of 0.1 ml/sec



Highlights

- Double-barrel injector, floor stand or ceiling mount
- Ease-of-operation through intuitive operators interface
- 10 ml/sec maximum flow rate with »change on the fly« control
 Extravasation detection (EDA) stops injecting if an
- extravasation is detected – Networkable through IrisCT and CANopen interfaces
- distributed by TOMOVATION GmbH



pressure prefilled; 60 ml empty Pressure limit Flow rate 20 - 150 psi (1.4 - 10.3 bar) for 60 ml syringes 0.1 - 0.8 ml/sHighlights - Dual syringe injector for magnetic resonance tomography Battery free operation - Single bolus and dual phase injections -Full color touchscreen for a greater visibility - Switch from injection to drip mode at any time - Drop in syringe loading reduces preparation time

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Selectable pressure increasement Pressure limit 300 to 1200 psi / bar Flowrate Variable 1 to 10 ml / s Highlights - Contrast and saline flush cardiovascular power injector – Precise fluid delivery, enhanced air management, fluid level sensing and gross air detection. - Accurate injection pressure control with user adjustable pressure limits Bolus sharpness delivering exact variable and fixed contrast via a responsive syringe Color graphical user interface

 Color graphical user interfawith on screen tutorial for simplified setup



Medtron Accutron CT-D

Capacity	200 ml (CM),
Delivery Pressure	200 ml (NaCl) Easy Loading Syringe (ELS)
	21 bar (304 psi)
Flow range	For both injection units:
	0.1 – 10 ml/s, programmable in steps of 0.1 ml/s

Highlights

- Absolutely wireless injector unit with rechargeable batteries
- Integrated heated syringe holder for Easy Loading Syringe (ELS)
 Wireless touchscreen remote control
 Use of prefiled syringes (as an option)

- Up to 6 phases Secured injection position (built-in sensor)
- Alternatively, display of injection parameters or pressure graph
- Aluminium housing
- Wall or ceiling syspension system (as an option)
- CANopen Interface (as an option)

Medtron Accutron MR

65 ml or 200 ml (CM), Capacity 65 ml or 200 ml (NaCl) **Delivery Pressure** Easy Loading Syringe (ELS) 21 bar (304 psi) Flow range For both injection units: 0.1 – 10 ml/s, programmable in steps of 0.1 ml/s Highlights - Absolutely wireless injector unit with rechargeable batteries - Touchscreen control panel with different languages -Wireless touchscreen remote control - Up to 6 phases - Secured injection position (built-in sensor) – Use of prefilled syringes (as an option) - Alternatively, input of flow rate or phase duration Pressure graph - Aluminium housing



oiehl-WA.de

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The /

Accurate | Reliable | Wireless

Two specialists in one device - fast high-pressure injections for angiography and multiphase injection profiles for computed tomography.



Hauptstraße 255 · D-66128 Saarbrücken Phone: +49 681 97017-0 · Fax: +49 681 97017-20 info@medtron.com · www.medtron.com

Medtron Accutron HP

Capacity **Delivery** Pressure

Angio mode: 83 bar (1203 psi), CT mode: 21 bar (304 psi) Flow range Angio mode: 0.1 – 30 ml/s, CT mode: 0.1 – 10 ml/s

200 ml

Highlights

- Two specialists in one device: fast high-pressure injections for angiography and multiphase injection profiles for computed tomography
- Absolutely wireless injector unit with rechargeable batteries
- Integrated heated syringe holder for Easy Loading Syringe (ESL) 200ml
- Wireless Touch-Screen remote control (as an option)

- Up to 3 phases
 Wall or ceiling suspension system (as an option)
 120 injection profiles can be defined and
- stored by the user (60 angio mode/60 CT mode) - Aluminium housing





Nemoto Dual Syringe-CT-Injektor DualShot Alpha B200			Nemoto CT-Injektor A	60
SyringesA: Contrastmedia A: 200 ml, 10 adapter/125 ml with Prefilled s B: Saline 200 ml, 100 ml with a A: 300 psi, B: 300 psi A: 1-100/125/200 ml in 1-ml-st B: 1-100/200 ml in 1-ml-steps	SyringesA: Contrastmedia A: 200 ml, 100 ml with adapter/ 125 ml with Prefilled syringe adapter B: Saline 200 ml, 100 ml with adapterPressureA: 300 psi, B: 300 psiThroughputA: 1–100/125/200 ml in 1-ml-steps B: 1–100/200 ml in 1-ml-steps		200 ml, 100 ml with adapter 300 psi 0,1–10 ml/s in 0,1-ml/s-steps	
 Highlights Needlepositioningtest Programmable autofill function Program memory on CF memory card Advanced Programming Functions Timing Bolus option Auto prime function 		 Highlights LCD-displa Real time n injection pa Economical 	y onitoring of the rameters entrance model	
RAD-BOOK 2011				



- -Wireless-enabled administration with Bluetooth and battery
- Available as pedestal version or with 3D ceiling mount

max. 400 ml/patient

16 bar (232 psi)

0.2 - 8.0 ml/s,



- Different software options available

- Different software options available

- Proven hygienic safety

- Roll pump injector for CT

Media containers

Injection volume

Highlights

Pressure

Flow rate

- Different software options available



ulrich medical MRI injector tennessee (XD 2003)		
Media containers	CA max. 2 x 1000 ml (for CT), CA max. 2 x 100 ml (for MRI)	
Injection volume Pressure Flow rate	NaCl max. 1 x 2000 ml max. 400 ml/patient 16 bar (232 psi) 0 2 - 8.0 ml/s	
	in 0.1 ml/s increments	
 Highlights Roll pump is accumulator Several injecout of one n (multi dosin) Ready for us Smooth wor interruption Proven hygic 	njector for MRI – free tions consecutively nedia container g) se anytime kflow without of daily workflow enic safety	

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38 INTERVENTIONAL SYSTEMS

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IV CARDIOVASCULAR



▶ GE Healthcare Innova 3131 IQ GE Healthcare Innova 2100 IQ Design 3131 IO Design Floor-mounted c-arm 1k a-Si Detector Biplane Angio system Detector Resolution Resolution 2.7 lp/mm 1.5k a-Si Size Size 20 x 20 cm 2.7 lp/mm 31 x 31 cm frontal, 31 x 31 cm lateral Highlights Highlights - Optimal detector size for dedicated neuro applications - Image quality goldstandard in cardiac imaging - Highest DQE for significant dose savings Fast gantry with smart patient sensing system - FP-CT techniques Highest DQE for significant dose savings - Powerful 3D-processing tools - Complete integration of intra-vascular-ultrasound - Total in-room control - Seamless data exchange for comprehensive workflow solution









- Ceiling-mounted C-arm
- Flat panel detector technology for outstanding image quality
- Grid controlled X-ray tube for superior dose management
- High-speed C-arm up to 60°/sec. rotational DSA
- Excellent coverage without patient moving



Siemens Artis zee floor-mounted Universal floor-mounted flat detector angiography system Design 2k a-Si with CsI scintillator Detector Resolution 1920 x 2480 pixel, 3.25 lp/mm Size 30 x 40 Highlights Advanced 3D imaging at low dose
 Slim-line design and flexible positioning capabilities for easy patient access with full body coverage

- New ergonomic system controls for smooth table-side operation
- Complete 3D portfolio including cross-sectional imaging with syngo DynaCT and syngo iPilot (3D Roadmapping)
- Real time needle navigation with syngo iGuide and the FD-integrated laser light

2k a-Si with CsI scintillator Resolution 1920 x 2480 pixel, 3.25 lp/mm Size 30 x 40

Highlights

Detector

- Advanced 3D imaging at low dose
- Functional imaging in the Interventional Suite with syngo iFlow - Slim-line design and flexible positioning capabilities for easy patient access with full body coverage
- New ergonomic system controls for smooth table-side operation Complete 3D portfolio including cross-sectional imaging with syngo DynaCT and syngo iPilot (3D Roadmapping)
- Real time needle navigation with syngo iGuide and the
- FD-integrated laser light

IV CARDIOVASCULAR



integrated laser light

Design

Tube

Detector

Toshiba Infinix – CFi/BP Toshiba Infinix – CFi/SP Biplane C-Arm + Omega-Arm Design Mono C-Arm floor mounted 20 x 20 cm or 30 x 30 cm 20 x 20 cm; 30 x 30 cm Detector Tube 3 MHU, 200 mA pulsed 3 MHU , 200 mA pulsed Highlights

Highlights

- Single User Operation
 Sequential Navigation for fast and easy throughput

- Full 3D capacity for Angiography
- Full range of Dose optimization techniques

- Hyper Handle for One Hand Operation
- FollowME Concept

- Five Axis System for maximum freedom and flexibility _
- Single User Operation Sequential Navigation for fast and easy throughput
- _ Hyper Handle for One Hand Operation
- FollowME Concept
- Full 3D capacity for Angiography
- Full range of Dose optimization techniques



42 IV CARDIOVASCULAR



IV MOBILE C-ARM





- Fully motorized imaging system

- Superb image quality - 1k x 1k

3.5/5.0 kW

9 Inch

Simple touchscreen interface

Power

II-Format

Innovative connectivity solution: CD/DVD, USB and DICOM
 Available as Compact, Compact2, Compact+ and Series

Landwind LWX-C





- Cost-effective solution

Can I have my images automatically opened in 2D, 3D, and 4D?

Depending on the case complexity?

Welcome to syngo.plaza. Reading, any dimension.

syngo[®].plaza is the first Siemens PACS to offer 2D, 3D, and 4D reading in one place. Let it boost your reading speed in combination with *syngo*.via. See your images open automatically in the applications that fit your case. Enjoy your preferred working environment thanks to easy adaption of tools and layouts. And experience flexibility in hardware and storage, which makes *syngo*.plaza your solution – today and tomorrow. **www.siemens.com/ReadingAnyDimension +49 69 797 6420**



Answers for life.

44 IV MOBILE C-ARM Medtronic O-arm System Philips Veradius 32 kW15 kW Power Power Digital flat panel detector 30 x 40 cm Field of view 27 x 27 cm II-Format Highlights - Flexible intraoperative 2D and 3D imaging -Fast 13 sec 3D scan - Large 2D image size and large 3D scan volume – Fully mobile Seamless integration in OR workflow - Easy of use: All motions motorized, simple control panel Highlights Position memory remembers scan positions Easy draping of the breakable gantry. – Super thin flat detector frees up valuable space – Superb contrast thanks to high dynamic range - Seamless integrating with StealthStation Navigation - Full DICOM3, USB, CD/DVD interfacing - Insensitive to magnetic fields

- No geometrical distortions
- Philips BV Pulsera with 3D-RX Power 15 kWPower 15 kW 31/23/17 cm **II-Format** II-Format 31/23/17 cm Highlights Highlights Based on the BV pulsera
 Unique combination of conventional 2D c-arm flexibility and top-quality 3D imaging in a single compact system - 12" image intensifier for largest 3D reconstruction, image processing functions

 - expanding clinical applications Motorized propeller movement of 200 degrees in only 30 seconds acquisition



- High quality images at a low dose, time after time
- Pulsed acquisition 30 pulses/sec
- Rotating anode power



IV MOBILE C-ARM 45



 $1.4 \ kW$

23 cm

High projection flexibility of 130°
 Minimum radiation with CARE

- Optional DICOM compatibility

with up to 5.000 images

(Combined Applications to Reduce Exposure) – MEMOSKOP CX provides a large image memory

Siemens Siremobil Compact L

- Fully DICOM compliant

Power

II-Format

Highlights



Siemens Arcadis Varic

(Enhanced Acquisition System)

2.3 kW

23 cm

- Remote user interface for direct control from within the sterile field
- Full DICOM compatibility

Power

II-Format

- Optional DICOM function

- Siemens Arcadis Orbic/Orbic 3D Power 2.3 kW **II-Format** 23 cm Highlights -Highly versatile intraoperative 3D imaging based on truly isocentric design -Brilliant images in every situation thanks to EASY (Enhanced Acquisition System) Full DICOM compatibility
 - NaviLink interface for 3D navigation
- Highlights - Intuitive system operation Small footprint and lightweight design - Continuous 1K2 digital imaging chain with up to 23 mA tube current Brilliant images in every situation thanks to EASY (Enhanced Acquisition System) - Full DICOM compatibility
 - RAD-BOOK 2011





IV ACCESSORIES

medifa MRT5600 II – mobile imaging operating tables

Chassis Table top Power Radiolucent factor

movable 2340 x 500 or 600 mm line or battery 1.0 mm/100 kv

Highlights

- Table top as well as rails at head end and beside the lying surface are made of carbon fiber for excellent usage of c-arms.
- Height adjustment, Trendelenburg positioning, lateral tilt as well as table top sliding by hand switch or operating panel at the column
- Longitudinal as well as transversal slide of table top additionally by joystick
- All adjustments work electro-hydraulically
- Supports patients weight up to 250 kg in each position

▶ IAE C100 XT

Special rotating anode X-ray tube unit, designed for digital and vascular applications.



Highlights

- Lead lined extruded aluminium body
- Outstanding thermal dissipation without external fluid circulation
- Internal pump, ensuring temperature uniformity
- Thermal switch operated fans allow silent operations at lower loads
- Comes in four configurations allowing freedom in equipment design

▶ IBA Multimeter MagicMax

▶ IAE C30 - RTM 70

Rotating anode X-ray tube unit specifically designed for mobile C-arm equipment



Highlights

- Lead lined single piece aluminium body
- Internal pump for oil circulation, to improve thermal exchange
- Choice of H.T. cable socket: Parker type Compact Taper or Claymount mini
- Optional remote water to air heat exchanger increases heat dissipation to 500 W continuous for demanding interventional applications
- Water cooling kit can be factory mounted or upgraded on field

dose, dose rate, exposure time, kV, dose/pulse, pulse rate, HVL

Highlights

- Small device with separate multifunction detector
- Connected via USB to PC or Notebook
- Intuitive use via PC interface

Simultaneous measurement of

and total filtration

- Time resolution: 100 µs
- Optimized solutions for all applications

IV ACCESSORIES 47









▶ PTW Diamentor C2

Dual channel dose area product (DAP) meter for patient dosimetry and quality control



Highlights

- Prized for biplane units
- Integrated printer
- Built-in test function for fast calibration and constancy checks
- Easy connection to a RIS or PACS



Highlights

Very fast 13 kHz sampling frequency for precise measurements even on units with a ripple up to 30 %!
Independent of orientation, angle, field size and distance

PTW Diavolt Universal Multimeter

- Long operating time by means of rechargeable batteries
- (non stop: up to 7 hours) - Data evaluation by means of the DiaControl expert software



- Small version for C-arms available



- Remote control, waveforms, and archiving with XLPRO Software
- Compact, easy to use

IV ACCESSORIES



Highlights

- PDC (Patient Dose Calibrator)
- Use to calibrate DAP/KAP meters
 Measures and displays DAP/Rate and Dose/Rate
- Optical and radiographic alignment markers
- Simple to use with optional computer control

RTI Electronics Piranha

The Piranha is designed as a truly self-contained, all-in-one, X-ray multi-function meter that assures accurate results in one shot. kV, time, dose, dose rate, HVL and total filtration

Highlights

- Self-Contained, All-in-One
- Auto-Compensation
- R&F, Mammo, Dental and CT
- Quick and Simple Set-up
- Enhanced Graphical Display
- Built-In Bluetooth for PC and PDA
- mA, mAs, and Light Probes Fits in the Palm of Your Hand

RTI Electronics Barracuada

The Barracuda X-ray multimeter has a cabinet that can house up to six different application modules, and can measure on all modalities; R/F, mammography, flouroscopy, pulsed flouroscopy, dental, panoramic dental and CT systems



- Highlights
- All in One, All at Once
- Auto-Compensation
 Enhanced Graphical PDA Display
- R&F, Mammo, Dental and CT
- Ionization Chambers
- Built-In Bluetooth for PC and PDA
- -mAs, and Light Probes
- Fits in the Palm of Your Hand

RAD-BOOK 2011

The one-shot full QA Solution

MagicMaX •

with **Primus** test plate

The New Generation for **QA** in Radiodiagnostics

Your fastest and easiest choice for constancy and dose acceptance tests

New Generation Features:

- mAs measurements included
- improved software





www.iba-dosimetry.com



Cloud–Based Services Deliver Expanded Functionality, Reduced Costs

or years healthcare providers have been expanding their investment in IT staff and infrastructure to address the exponential growth in patient and imaging data. With the worldwide economic downturn creating tighter budgets, facilities of all sizes are turning to cloud-based services for radiology and other selected clinical applications. Cloud technology delivers exceptional functionality at an affordable cost and frees up existing staff and equipment to manage other core functions.

Cloud-based services involve leading edge platforms that are managed by specialized teams in highly secure data centres. These services allow efficient Internet-based data sharing with authorised users for a monthly fee, based on the number of imaging exams produced each month. This new delivery model offers extreme elasticity, since data, users and healthcare facilities can be quickly and easily added or removed from the "cloud". Once connected to the cloud, users and facilities can invent and adopt new collaborative workflows by leveraging the powerful capabilities enabled by universal access to data.

Retaining cloud-based PACS services from an outside provider delivers these substantive benefits:

- Delivers high service levels while placing the responsibility of maintaining and managing the advanced systems to healthcare industry experts;
- Reduces the need for highly skilled, in-house IT personnel;
- Trims investment in infrastructure; and
- Eliminates the risk of systems obsolescence.

Ultimately adopting this new delivery model for IT applications can reduce total cost of ownership by up to 30 percent compared to traditional in-house systems.



Radiology Uorkflow in the Cloud enterprise-wide solur secure image access mote clinicians. Carea assume management

Cloud-based services have been deployed in many industries, but the healthcare market requires adherence to regulations that govern personal health information access, tracking and reporting as well as stringent data security and confidentiality requirements.

Nij Smellinghe Hospital Implements RIS/PACS Service

Nij Smellinghe Hospital in Drachten, The Netherlands, contracted with Carestream Health for its cloud-based RIS/ PACS eHealth Managed Services. This enterprise-wide solution delivers fast, secure image access by on-site and remote clinicians. Carestream Health will assume management of approximately 632,000 studies over the term of the contract, and the hospital will avoid the need for infrastructure management and its associated costs.

Nij Smellinghe Hospital is known for its use of advanced technologies and for delivering high-quality health services to the region of South East Friesland with a population of 120,000 inhabitants. Nij Smellinghe was the first hospital in The Netherlands with enterprise-wide PACS facilities.

"Our relationship with Carestream over the years has been very positive but when our previous contract for PACS ended, we felt it was sensible to inves-

50





tigate what services the market was offering," said Wim Loman, IT Manager at Nij Smellinghe Hospital.

"After a thorough evaluation process, Carestream still offered the best solution, which now includes advanced reading tools such as native 3D, vessel tracking, cardiac and virtual colonoscopy," Loman said. "The new contract will allow us to concentrate on patient care while Carestream manages the PACS infrastructure on our behalf. Ultimately the cloud-based, fee-for-use service lowers our investment in equipment, technology and personnel resources."

Since patient information can be shared with authorised clinicians over an Internet connection, this service model makes it possible for radiologists to perform remote reading and obtain a second opinion from other radiologists or specialists when needed.

Contracting RIS/PACS functionality as a service also eliminates the danger of

obsolescence since Carestream continuously maintains and upgrades its data centres and on-site technology. Patient data and exam information are synchronised so identical information is available to all users, regardless of location.

The company's eHealth Managed Services platform employs a vendorneutral infrastructure powered by Carestream's advanced technologies to allow the sharing of information among disparate systems.

"Our new eHealth RIS/PACS Services deliver all the functionality of PACS, including image management, viewing, distribution and storage," said Patrick Koch, Business Director, WW eHealth Managed Services. "Most healthcare providers achieve lower overall costs by purchasing this service. They can focus their resources on patient care and simultaneously benefit from our leading edge management and security technologies."

Cloud Technology Used to Read Emergency Exams From Seven Hospitals

A leading teleradiology company in France is using Carestream Health's eHealth Services to read imaging exams during nights and weekends for emergency patients from 2 hospitals at the start of their activities, to seven different hospitals now. More hospitals are expected to connect to the cloud to access remote reading support in the coming months. Carestream's Health cloudbased technology ensures efficient and secure data exchange from the hospitals to the teleradiology company's reading centre. Radiologists read the cases using a fully featured CARESTREAM PACS workstation. Having radiologists available after-hours enhances patient care, since experienced radiologists are not readily available at French public hospitals during night and weekend hours.

Select Radiology Service Providers Carefully

There are very few companies that can marry expertise in healthcare environments with robust cloud-based services – so healthcare providers need to choose wisely. The service needs to allow sharing of patient information as well as prior and current imaging studies. Radiologists at any location need access to specialized reading tools, and the service must support delivery of reports to existing RIS and EMR/EMR systems. A vendor-neutral architecture that allows communication with disparate systems and support for IHE and other industry standards is also essential.

When it comes time to consider replacing RIS/PACS and other clinical systems, it's wise to consider cloud-based options.







he 2500-bed Nuremberg Hospital, Germany, is one of the largest municipal hospitals in Europe. Faced with rapidly growing imaging data volumes, management decided to outsource long-term archiving of all images created in the radiology and cardiology departments to an external manufacturer-independent service provider. As part of a tender procedure for a PACS, long-term archiving services were requested and awarded in a separate lot.

Back in 2000, the radiology department of Nuremberg Hospital started archiving digital images. In the beginning the data were stored by modality and within five years a complex storage area network (SAN) had developed. When a hospitalwide PACS was procured which was to cover the sites Nuremberg North, Nuremberg South as well as three other municipal hospitals in nearby towns, offers for longterm archiving services were invited in a separate lot.

A Tender Point

"We perform 250,000 examinations per year and create an image data volume of 25 GB every day. We understood pretty quickly that long-term archiving is a crucial issue", says roland Simmler, medical physicist. Since patient data are highly sensitive, they are subject to very demanding privacy requirements. Consequently, the handling of sensitive data is a major selection criterion for any long-term archiving solution. As roland All image data generated in the municipal hospitals Nuremberg North and Nuremberg South and in three hospitals in the nearby towns of Altdorf, Hersbruck and Lauf are transmitted to Telepaxx for long-term archiving.

Simmler went about to design the tender procedure, he set his priorities: above all, he wanted to know the costs for the individual solution after five and after ten years and the costs for hardware and maintenance.

Lowest costs per terabyte

Under his guidance a 15-person task force meticulously analysed the offers. In order to avoid "gut feeling" decisions a wide array of parameters was assessed and graded on a five-point scale. "In the end we had arrived at the exact costs for archiving one terabyte of data over





ten years and Telepaxx was clearly the least expensive service", explains Roland Simmler.

Most of the other bidders had suggested hard drive-based solutions or juke box systems with DVD or tape archives. Simmler's task force had left it up to the bidders to act as sellers and quote a purchase price for a solution or to offer a service. Still, Telepaxx was unbeatable. The company based in the small town of Büchenbach near Nuremberg is proud of its unique cooperative approach: Telepaxx solves problems which otherwise every IT team in every hospital would have to solve for itself - reinventing the wheel over and over again. A safe and costefficient archiving concept can run up to 30 years.

Professor Dr. Dr. Reinhard Loose, director of diagnostic and interventional radiology at Nuremberg Hospital North, has never regretted the decision



The data volumes generated by modern imaging systems are rapidly increasing. Providing appropriately sized long-term archiving space is no longer an issue at Nuremberg Hospital.

for an external service provider: "Archiving patient images in compliance with the German x-ray ordinance is not the core business of a radiology department. It is a task I gladly hand over to a specialized computer center which fulfils all statutory requirements." Frequently the real serious archiving problems begin whenever a manufacturer decides to discontinue support of a hardware component.

www.telepaxx.com



RAD-BOOK 2011









▶ GE Healthcare GE SenoBright				
Technology	Contrast Enhanced Spectral Mammography Combination of iodinated contrast medium and digital mammography with a-Silizium detector			
	 Highlights Detect angiogenesis Improved sensibility, specificity and negative predictive value (NPV°) New diagnostic strategy for unconclusive mammography, for tumor staging Easy communication with surgeons 			



Presentatation The Use of Breast Tomosynthesis in Clinical Practice



Dr. Fric Escolano Radiologist in private practice, Grenoble, France



Prof. Giovanni Gandini Radiology Professor and director of the diagnosis department for images at the University Hospital San Giovanni Battista, Torino, Italy



Dr. Pierre Gignier Radiologist with a special interest in senology, Hôpital Privé of Antony, France



Dr. Pietro Panizza Chairman of the Italian Society of Radiology, and Radiologist, San Raffaele Hôpital, Milano, Italy



Prof. Pattrice Taourel University Professor, Radiologist and department head, Hôpital Lapeyronie, Montpellier, France



Dr. Christophe Tourasse Head of the breast imaging center, Hôpital Privé Jean Mermoz, Lyon, France

ozens of papers, scientific and poster sessions on breast tomosynthesis were offered at the 2010 Radiological Society of North America annual meeting. Interest was unusually high since Hologic, the women's health company, received a Food and Drug Administration (FDA) "Approvable Letter" for a 3D digital mammography tomosynthesis system just before the meeting. Commercial Hologic systems are already installed in Europe, the Middle East, South America, Canada and Mexico and parts of Asia but the biggest opportunity for the new technology is the United States where recall rates for breast cancer screening exams run from 10 to 15 percent. On 11 February 2011 Hologic received full FDA approval on its 3D digital mammography breast tomosynthesis system, joining a large part of the global community.

S. G. Collins, a video film producer based in Amsterdam, videotaped the comments of dozens of luminaries in Europe, and North and South America for a documentary on tomosynthes that premiered at RSNA. Below are quoted excerpts from the documentary.

What does breast tomosynthesis do that mammography doesn't?

Prof. Gandini: The main problem with digital mammography is the same as analog mammography: the overlapping of radiopaque images - therefore false images, images that we call overlapping. Tomosynthesis should avoid these 'summation' images, because it breaks up the image.

Dr. Tourasse: Tomosynthesis gives us more confidence in our readings, which leads to a lower recall rate. In most cases, cancer not seen on 2D can be identified on a second reading with tomosynthesis. Dr. Gignier: Tomosynthesis enables us

to eliminate a false image made by tissue overlap. We have found cancers with our 3D tomosynthesis images that were not visible with our 2D images.

The other big benefit of tomosynthesis is the improvement of the workflow of patients, since we don't do localized compression views any more, since thanks to the tomosynthesis, all [tissue] overlays are removed.

Dr. Panizza: The first time I saw tomosynthesis, I imagined the possibility of reducing [the number of] ultrasound [exams]. That is nowadays my main problem, because there are few radiologists and non-radiologists who are able to do high quality ultrasound exams.

Ultrasound is an expensive test, which is not so easy to use in the screening phase. Therefore the possibility of having greater sensitivity than mammography thanks to tomosynthesis can reduce the number of ultrasounds and therefore costs.

Prof. Gandini: What I can say for sure is that tomosynthesis increases the confidence in the radiologist when it comes to diagnosing a malignant tumor. Because two characteristics that are typical of breast cancer are better demonstrated. And those are the calcifications, and the spiculation margins. Spiculations are more visible with tomosynthesis than with 2D mammography.

Dr. Gignier: We installed a Hologic Selenia Dimensions breast tomosynthesis system a year ago. We must have performed some 5,000 exams on that machine. Tomosynthesis allows us to better localize the lesion's position in the breast, especially in the density of the breast.

Have you found cancers with tomosynthesis you might have missed with 2D?

Prof. Taourel: We have had significant experience in tomosynthesis; we must have made some 3,000-4,000 exams





2D 3D slice 14 slice 18 slice 22 slice 26 slice 30

In the 2D image on the left. there is a potential lesion in the subareolar region of the breast. In the tomosynthesis images on the right, it is easy to see that there is no lesion present. One can pick out individual structures on the separate slices, which summate to form the potential lesion seen on the two-dimensional projection image.

in the 18 months that we've been using it. We are deeply convinced that our patients benefit from the tomosynthesis.

We have detected additional cancers... It's true that it doesn't happen every day, not even every week, but... every team using [tomosynthesis], and ours in particular, finds some additional cancers that wouldn't have been seen in mammography, since there was no trace of them, or they wouldn't have been seen in mammography because they weren't pertinent enough – and even if there were some signs, they were too subtle, so they have been missed.

So there are cancers we detected – we could see better [with tomosynthesis]. We could see contralateral cancers, we could see multicentric ones.

Does tomosynthesis take more time than a conventional mammogram?

Dr. Escolano: The time needed for reading one tomosynthesis is comparable to a doctor having to read one or two additional images [views]. But you have to counterbalance this doctor's time with the fact that before, he or she would also have to read additional images. And the patient needed to go back to the mammography room, we had to wait for the results of this additional image. So generally speaking, even though there is some additional time required for a sin"We are deeply convinced that our patients benefit from the tomosynthesis."

gle tomosynthesis reading, on the whole we are gaining doctors' time per patient. **Prof. Gandini:** If tomosynthesis allowed me to reduce the number of ultrasound tests – and an ultrasound test takes about 20 minutes – I should compare the time that I save, those 20 minutes, with the minute that I need to read the tomosynthesis images. This would certainly be a lot of time saved for the doctor.

What patient would benefit the most from breast tomosynthesis?

Prof. Gandini: The patient for whom tomosynthesis is useful is a woman with a dense breast, in about 40 to 50 percent of the total; in women who have had surgery for breast cancer; and in those cases where you have asymmetries in the fibrous glandular between the two sides. These are the patients for whom tomosynthesis can be crucial. **Dr. Taourel:** In the beginning we believed that tomosynthesis would be most effective in dense breasts. In fact that's not really the case. If the breasts are really dense, think of plaster: you cut a lump of plaster, you get slices of plaster, and you still can't do any diagnostics.

To be able to do a diagnosis, there must be some interface between the lesion and the fat tissue, and this is how you can make your diagnosis.

So, in my opinion, its best use is not in particularly dense breasts or low density breasts. In the dense breasts it will miss fewer cancers - although it still will... In low density breasts we won't miss any, but also, it's going to be most effective in what I call "disharmonious breasts" - breasts where the longitudinal features are not well organized, where in mammography we see pseudo distortions everywhere. In tomosynthesis we're really able to say "no, this is just a tissue overlap." Or sometimes, we will be able to see something amidst the fat tissue that was not seen otherwise, because in tomosynthesis we can clearly see distortions. Even if the tumor is not dense, it distorts, it pulls the sides, and that's how we can recognize it.

The comments included in this article are the opinions and personal stories of the individuals quoted and not necessarily those of Hologic.

Hologic Selenia Dimensions 2D/3D Mammography System*

Highlights

- In Hologic clinical studies, 2D plus 3D mammography compared to 2D mammography alone demonstrated superior clinical performance in



specificity, the confidence to rule out breast cancer without recalling the patient for further study, and sensitivity, the proportion of mammograms with cancer which were correctly diagnosed.

- -A 2D/3D scan is done under the same compression, takes only seconds longer than a 2D mammogram and has a total exam dose within U.S. Food and Drug Administration guidelines.
- * Selenia Dimensions 2D/3D systems are available commercially in more than 40 countries. The system is available as a 32D only system in the U.S. awaiting FDA approval of the 3D option.

Hologic Selenia Dimensions 2D Digital Mammography*



Highlights

- Selenia Dimensions 2D mammography offers superb image quality with reduced patient dose and high throughput without compromising patient care.
- Dimensions 3D software is a purchasable option on existing Selenia Dimensions 2D systems. Enabling the 3D capability on a Dimensions 2D system involves a software key and adjusting a PC-board setting. There is no need for new hardware.
- * Selenia Dimensions 2D/3D systems are available commercially in more than 40 countries. The system is available as a 2D only system in the U.S. awaiting FDA approval for the 3D option.

Hologic MultiCare Platinum & StereoLoc II Stereotactic Biopsy



Highlights

- The MammoSite ML 5-day targeted breast radiation therapy system is an option for many women diagnosed with earlystage breast cancer.
- MammoSite therapy enables the radiologist to use a higher daily dose for a shorter period of time, typically 5 days versus 5 to 7 weeks for conventional breast radiation therapy.



Highlights

- The MultiCare Platinum prone and StereoLoc II upright stereotactic breast biopsy guidance systems provide exceptional image quality and pinpoint accuracy in tissue targeting with improved patient comfort. -Hologic breast biopsy guidance systems offer faster, safer, less
- invasive options for women than open surgery.



Hologic Minimally Invasive Breast Biopsy Devices



Highlights

- Hologic's flagship stereotactic biopsy device, ATEC, is a fast, safe and simple and compassionate vacuum-assisted breast biopsy solution.
- Celero is the first vacuum-assisted, spring loaded core biopsy device designed for use under ultrasound-guidance.
- Hologic's newest vacuum-assisted breast biopsy device, Eviva, is a fully integrated stereotactic biopsy solution.

Hologic MammoPad Radiolucent Breast Cushion



Мо Anode Filter

Konica Minolta Regius Pureview M

Highlights

kV Range

- Revolutionary new x-ray mammography system based on phase contrast technology - Sharpness and spatial resolution highly improved by the use of phase contrast technology
- Reading at 43.75 µm thus
- equivalent to resolution of around 70 million pixels
- Flex AEC 48 independent
- detectors





- MammoPad is a soft, warm breast cushion used to provide patients a more comfortable mammography exam.
- MammoPad is compatible with all digital and analog
- mammography systems.



Highlights

- Extremely easy to use and manage
- Access to all images (including previous images) in seconds
- Direct findings in the image
- Hanging protocols can be configured individually to automate your routine procedures
- Outstanding image quality (2048 greyscale)
- Excellent price/performance ratio



- Smooth procedures make your patients feel at ease



- Perfect image quality to help with a diagnosis
- Smooth procedures make your patients feel at ease











BREAST IMAGING SOLUTIONS

The **promise** of **breast tomosynthesis** is here

The Hologic Selenia[®] Dimensions[®] system is the first practical tool to deliver on the extraordinary promise of breast tomosynthesis. The Selenia Dimensions system offers:

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The largest angular range in industry increases depth resolution and contrast *not available in the USA



MAMMOGRAPHY ACCESSORIES

Siemens syngo MammoReport

Agfa HealthCare iCAD SecondLook Digital



Highlights

- First real multi-modality solution for breast care
- Offers 2D and 3D reading and it unites mammography,
- tomosynthesis, 2D and 3D ultrasound, and breast MRI in one - Connection with third-partyimaging and IT systems, including multiple RIS at a time
- Customization to personal workflow and image arrangement, controllable with a single key
- Advanced display layouts for different demands
- DICOM and ÎHE workflow compliance

63

- Highlights

 SecondLook Digital is a second opinion tool for Agfa HealthCare's CR Mammography
- Adds value in daily routine
- _ Can be used in mammography screening as well as by diagnostic HealthCare providers
- Markers that indicate potential microcalcifications and/or masses are visible on Âgfa HealthCare's IMPAX Breast Imaging Workstation

▶ IAE C340

Water cooled mammography tube unit, for beam scanning mammography equipments and high patients throughput screening applications.



Highlights

- Brass body lead free X-ray shielding
- Internal pump for oil circulation improves oil to casing
- thermal exchange
- Water cooledjacket avoids remote oil circulation
- Compact lightweight structure

HVL, total filtration, mA and mAs

- 800 W continuous dissipation for high energy techniques and high patients throughput

▶ IBA MagicMaX mam Multimeter

Test device for checking spatial resolution, contrast resolution, signal to noise ratio, dynamic range, image limitation towards the chest wall, AEC performance

Highlights

- Modular construction
- _ Different test inserts
- Basic plate with Al step wedge
- -Structural plate with turnable spatial resolution test
- Additional attenuation plates



Highlights

- Small device with separate super small footprint multifunction detector
- Connected via USB to PC or Notebook
- Intuitive use via PC inteface
- Time resolution: 100 μs
 For Mo/Mo, Mo/Rh, Rh/Rh, W/Rh and W/Ag

64 MAMMOGRAPHY ACCESSORIES



Siemens syngo MammoCAD*

Highlights

- Advanced image processing capabilities with state-of-the-art pattern
- recognition technology – Up to 4 DICOM input connections
- Up to 10 DICOM output connections
- CAD processing of a four-image case within less than 90 seconds
- Designed for MAMMOMAT Novation and MAMMOMAT Inspiration*
- *not available in the USA





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ĥĥ <u>R/F SYSTEMS BUCKY</u>









Philips BuckyDiagnost Standard room Floor-mounted system for standard patient throughput Height adjustable with various table top sizes 30 – 85 kWwith several options

Highlights

Design

Table

Power

- Optional generator functionalities are AEC, APR, automatic collimation, VarioFocus tracking and tomography
 Flexible, interchangeable components with a large range of
- tables, stands, tube carriers, tubes and generators Same handling and options for floor-mounted system and ceiling-mounted tube carrier
- Digital upgrade possibilities via PCR Eleva or digital detector - Ergonomic design enabling easy handling and near patient control

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R/F SYSTEMS BUCKY



- Including wall bucky stand





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Your fastest and easiest choice for constancy and dose acceptance tests

New Generation Features:

- mAs measurements included
- improved software

tect.



www.iba-dosimetry.com

FRANCE STATEMS BUCKY





Power 30, 55, 65, 80 kW Highlights

- space requirements
- Floating tabletop with weight capacity of up to 450 kg
- Synchronized tube and bucky tray movements
 Tube can be rotated for cross-table exposures

- Conventional radiography solution with integrated X-ray tube - Robust and easy-to-use, accommodating a wide range of
- clinical imaging Wide range of tabletop movements with table height adjustments
- Automatic exposure control



R/F_SYSTEMS MOBILE







RAD-BOOK 2011
7 R/F SYSTEMS MOBILE











- Excellent image quality with lowest possible dose (SID: 180 cm)
- All movements are motorized and independent for maximum configuration versatility

▶ GE Healthcare Precision 500D

Nearby controlled R+F System

1024 x 1024, 12 bit CCD

32 or 40 cm

- Innovative control system based on PC server technology



- Efficient dose management

- High resolution image chain

- Digital system tailored to customer needs

- AutoEx - fully

Design

II-format

Image system

- parameter optimization
- Efficient dose management
- High resolution image chain
- Innovative user interface
- Seamless digital workflow
- DR Imaging option available with FlashPad

7? <u>R/F SYSTEMS FLUORO</u>



Philips Juno DRF Design Digital tableside controlled R/F system 1 k x 1 k matrixTechnology Resolution II-format 33 cm or 40 cm Image system Size Highlights - One digital system for

- One digital system for fluoroscopy and radiography from pediatrics to bariatrics
 Open design to accommodate bariatric patients up to 272 kg
 Ergonomic single-handed system operation with OPTI Grip handle
 FLUOROSPOT Compact high-resolution digital imaging
- system with intuitive user interface and DICOM 3.0 interfaces - Comprehensive CARE dose reduction package
- Mobile flat detector (option) for fully digital radiography workflow



- Unique design that provides both radiography and fluoroscopy
- in one system
- Detachable tube arm for maximum flexibility
- Compact design that allows it to be installed in small rooms - Digital version of DuoDiagnost provides all benefits of digital technology: time, cost and dose savings
- Seamless integration into DICOM network



R/F_SYSTEMS FLUORO 73



Shimadzu Sonialvision safire Siemens Artis zee multi-purpose Detector Direct-conversion flat panel detector (a-Se) Design Multi-purpose flat detector fluoroscopy and angiography system 2k a-Si with CsI scintillator Resolution 3.3 lp/mm Detector Size 17" x 17" (43 x 43 cm) Resolution 1920 x 2480 pixel, 3.25 lp/mm Size 30×40 Highlights 3D applications - New multi-host imaging Highlights system - Premium R/F system with dynamic direct-conversion flat – Right or left side suspension for endoscopic applications panel detector 2k-acquisition available - Wide range of functions New ergonomic system controls for smooth table-side operation

- Digital tomosynthesis for general radiography
 Dual Energy Subtraction
- Slot radiography

- Undertable/overtable positioning
- Full in-room-control (on trolley)
- Remote controls for room operation available



74 R/F SYSTEMS FLUORO



Highlights

- Easy Userinterface

- Full patient coverage

 Full clinical flexibility: G.I; Venography; Urology; ERCP; Angiography; Radiography, Oblique Imaging, etc.

- Full range of Dose optimization techniques

RAD-BOOK 2011.

- Stepping DSA

Highlights

- Complet eclinical flexibility

- Easy and quick handling

New Harmony User Interface
 Full anatomical coverage

-Full range of Doseoptimization techniques

BONE DENSITOMETER



Highlights

- The complete solution for the diagnosis and evaluation of fracture risk (multi-site, whole body, DVA, Hip Structure Analysis, Frax, etc.)
- Technology 2D-Fan Beam features a detector with 256 elements and provides the highest image resolution for an optimal diagnosis
- Exams can be performed in only 30 seconds per site
- Powerful easy-to-use software platform

Hologic Discovery Bone Densitometers



Highlights

- Discovery bone densitometry systems provide accurate and precise bone density measurement of the spine, hip, whole body and forearm.
- With one scan the Discovery system can detect osteoporosis, vertebral fractures and visualize abdominal aortic calcifications - an indication of heart disease.

R/F SYSTEMS ACCESSORIES

Dunlee Replacement Tubes



- Replacement tubes for more manufacturers than any other company in the industry (GE,
- Siemens, Toshiba, Shimadzu, Philips, Elscint or Picker) Tube stocks at major airport hubs throughout the United States, Asia, Europe and Latin America.

remote controlled tables and digital systems

- -24/7 365 days per year
- shipment of most popular replacement tubes, typically with same-day or next-day delivery

▶ IAE RTC 600

Rotating anode graphite X-ray tube, specifically designed for

- Warranty



Highlights

- standard grids, mammography grids and grids designed for special applications
- -low absorption because of the fiber interspacer
- -higher SNR with detectors in digital applications, and a
- significant dose advantage over aluminum interspaced grids - any focal distance between 70 cm and 300 cm
- -less weight than aluminum interspaced grids, up to 1/3

Test device for checking image quality parameters at fluoroscopic units



Highlights

- High anode heat storage for repeated loading
- Enhanced anode heat dissipation, provided by high emittance coating and target design
- Severe tests during conditioning assure reliable performances
- Ground glass window for consistent HVL
- Variety of available housings allows flexible systems configurations



- Modular construction:
- structural plate and separated attenuator
- Check of spatial and contrast resolution, size of the radiation
- field, artefacts; kV test area Compact Al pre-attenuator or PMMA and Cu plates
- Available in two different sizes

R/F SYSTEMS ACCESSORIES 76



- Easy-to-use

- Optimized solutions for all applications

PTW DIAMENTOR CM

Miniature dose area product (DAP) meter for patient dosimetry and quality control



Highlights

- Compact solution ideal for integration in mobile units
- Built-in test function for fast calibration and constancy checks
- Easy connection to a RIS or PACS



Radcal ACCU-PRO

Highlights

- Use for manufacturing, installation, QA, and service
 R/F, mammography, CT, dental, leakage
 Ion chamber and solid state sensor dosimetry
 Correctly measure AEC fluoro and filtered beams

- Remote control, waveforms, and archiving with XLPRO Software
- Compact, easy to use



Highlights

filtration and waveforms

R/F SYSTEMS ACCESSORIES RTI Electronics Piranha RTI Electronics Barracuada The Piranha is designed as a truly self-contained, all-in-one, X-ray The Barracuda X-ray multimeter has a cabinet that can house up to six multi-function meter that assures accurate results in one shot. kV, time, different application modules, and can measure on all modalities; R/F, dose, dose rate, HVL and total filtration mammography, flouroscopy, pulsed flouroscopy, dental, panoramic dental and CT systems ► Highlights - Self-Contained, All-in-One Highlights All in One, All at Once Auto-Compensation -Auto-Compensation - R&F, Mammo, Dental and CT Enhanced Graphical PDA Display - Quick and Simple Set-up - R&F, Mammo, Dental and CT Enhanced Graphical Display Built-In Bluetooth for PC and PDA - Ionization Chambers

- -mA, mAs, and Light Probes
- Fits in the Palm of Your Hand

- Built-In Bluetooth for PC and PDA -mAs, and Light Probes

- Fits in the Palm of Your Hand

Significant improvement of

diagnostic results compared to

- Increase of patient comfort due to automatic

Easy setting of gas volume and pressure

adjustment of over pressure and faster resorption

manual room air insufflation

- Display of gas consumption

- Four adjustable flow rates

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COMPUTED & DIGITAL RADIOLOGY 79

RAD-BOOK 2011





The Wireless Cassette Digital Radiography Detector: AeroDR

ntil recently the use of cassette type Digital Radiography was not ideal because of the weight and or the required connection of cables. The Aero-DR has been developed not only to solve the above problems but also to enhance cycle time and significantly improve image quality, while maintaining the operability and performance of Computed Radiography. With the AeroDR, Konica Minolta has solved many of the problems of the existing cassette type DR and developed a real cassette DR system that is capable of producing high-quality images for diagnosis, even at a low dose. At the same time, Konica Minolta has made various improvements, such as a wider dynamic range, a safer and more durable battery and quick recharging of the battery. The AeroDR was designed to comply with the ISO standard; therefore it is possible to retrofit the AeroDR in any existing X-ray room, using it in the same manner as you would a CR cassette.

Image quality

High image quality at a low dose is one of the most important specifications of any detector. Easy operation and a wide dynamic range are other key factors. Because of the specifically developed technology, Konica Minolta achieved both a high DQE and a wide dynamic range.

Real Flexibility in general X-Ray

DQE

Fig. 1 shows a schematic cross section of the interface between the scintillator and the TFT panel in an indirect conversion type DR system like the AeroDR. In many conventional indirect conversion type DR systems, the CsI scintillator and the TFT sensor panel are attached via a protective film formed on the columnar CsI scintillator surface. Recently, Konica Minolta developed a new technology whereby the CsI scintillator is produced to contact directly with the TFT sensor panel without any protective film in between. The development of this technology has made it possible to guide the light emitted from the scintillator to the photodiode without causing the light to be dispersed at the interface with the TFT.

In addition, by optimizing the technology that controls the growth of the



Fig.1: Schematic cross section of scintillator and TFTpanel. (a) AeroDR, (b) Conventional DR

AERO DR

AeroDR is Konica Minolta's new general X-ray detector

- WirelessCassette
- Cassette size 35x43cm
- Highly durable
- Low dose
- Unique roaming
- Auto focus function
- In house production from detector to software Extremely versatile, durable and

the lightest in the world.

scintillator crystals, we managed to improve the efficiency of the transmission of light emitted from the scintillator. As a result, the DQE was increased by 20%. This technology permits the AeroDR to maintain a high DQE even at a low dose.

Lightweight and Durability

Robust housing

To make the AeroDR lightweight and durable, a cylindrical monocoque carbon fibre cassette case was developed. The battery is incorporated in this cassette; therefore a notch or opening in the housing for battery replacement is unnecessary. Special magnesium alloy boarders complete this state of the art light weight and durable housing.





Glass Substrate CsI Layer TFT Sensor

Protection of CsI scintillator

In order for the CsI crystal to transform X-rays into light as efficiently as possible, it is essential to keep the crystal structure of the CsI intact. In order to do this, a double-glass structure in which the CsI scintillator glass plate and the TFT panel glass plate are placed and sealed together, is used for the AeroDR. This structure is schematically shown in Fig. 2.

The double-glass structure not only enhances the load-bearing performance but also prevents the scintillator edge from being deformed by a mechanical shock (e.g. cassette being dropped).

Safety in control

Newest battery technology

For a battery, which should meet our high requirements, including the safety of the patient, Konica Minolta adopted Fig. 2: Glass seal structure for Csl scintillator

the lithium ion capacitor. The time required to fully recharge the capacitor is 30 minutes, less

than one-fourth of the time required by other wireless DR cassettes. In addition, unlike the lithium ion secondary battery, the lithium ion capacitor deteriorates little even when the power is constantly supplied over a cable. On the other hand, even if the electrodes are short-circuited, there is no risk that the capacitor will emit smoke or catch fire. To prolong the usable time of the detector we incorporated power saving functions, that reduce the power consumption considerably compared to conventional detectors.



An important element that highly contributes to the workflow is not only the detector, but the combination of the detector and software. To improve workflow, easy operation of the console is crucial. To allow the flexibility of Computed Radiography in sharing cassettes between X-ray rooms and mobile units, a special roaming functionality has been incorporated into the software. The number of detectors that can be registered to the CS-7 console is virtually unlimited and is as simple as just realising a brief wired connection between the AeroDR and the CS-7 for registration.

To be able to simply recognise and follow the AeroDR within the X-ray room the unique Auto Focus function has been developed. This functionality enables the user to very easily identify which detector is located where: in the bucky table, wall stand or free position.

Conclusion

In developing this new product, Konica Minolta did not decide on product specifications in view of technical limitations. Instead, we analysed the way the cassette DR detector should be from the customer's standpoint and incorporated all the study results into the design of the AeroDR. Rather than be completely satisfied with the present success, we intend to continue developing innovative new products and with that contribute to the future improvement of the quality of medicine in the world.

Reference:

Development of a Wireless Cassette Digital Radiography Detector: the AeroDR (KM technology report vol.8(2011)



82 <u>CR</u>







RAD-BOOK 2011

Slots 4 Capacity 165 Imaging plates (IPs)/h Solution 5 - 20 pixel/mm • Highlights 5 - 20 pixel/mm • EUREF & PAS 1054 compliant First mammography CR system approved by FDA • Fastest mammography system available 50 µm • Needs 30% less dosage for pediatric exams • Worldwide more than 5,000 FCR

<u>CR</u> 83 ▶ Fujifilm FCR XG5000 Fujifilm FCR Profect One Slots Slots 4 165 Imaging plates (IPs)/h Capacity Capacity 85 Imaging plates (IPs)/h Resolution 5 - 10 pixel/mm Resolution 5 - 20 pixel/mm ► Highlights - EUREF & PAS 1054 0 Highlights - Worldwide more than 2 70.000 Fujifilm CR compliant First mammography CR system approved by FDA Needs 30% less dosage for systems installed - Universal applicable - IHE certified - Wide dynamic range pediatric exams - Optimized workflow - Compact system





RAD-BOOK 2011



ssettes/h (18 x 24 cm) 143 cassettes/h
5 cm, in high-speed mode)
l/mm,
mm in high-speed mode

- Customizable Eleva User Interface combined with superb image quality by UNIQUE image processing
- High-throughput, multi-slot system, for environments using a central reader set-up
- For general radiographic applications including orthopedics
 Orthopedic automatic image stitching



- 40 % increase of DQE and enabling high-resolution imaging like mammography (HR-BD cassettes/plates)
- Low-dose imaging for pediatrics (ST-BD cassettes/plates)
- Orthopedic automatic image stitching





See life more clearly



86 <u>DR</u>





- Motorized positioner
- Floor mounted



- Excellent image quality with lowest possible dose (SID: 180
- All movements are motorized and independent for maximum configuration versatility
- Innovative control system based on PC server technology







- Calibration once a year
- New image processing software



Detector Technology - DRX-1 Detector Technology - DRX-1C Resolution **Detector Size**

GOS cassette size, wireless DR detector CsI cassette size, wireless DR detector 139 micron pixel pitch 35 cm x 43 cm

Highlights

- The world's first wireless cassettesized DR detector, converting conventional analogue GE, Siemens or Shimadzu mobile units into DR image capture systems.
- Quick, easy transition to digital radiography (DR). Minimise disruption and downtime with one-day installation.
- Wireless & Hygenic no cables interfering while patient positioning, no cables collecting dirt from floor ..
- Images immediately available at capture console, and can be quickly forwarded to multiple network destinations.
- Increased workflow and productivity
- - used for tabletop projections - Quick, easy transition to with one-day installation. Extend the life of conventional x-ray equipment by using it for DR image capture.
 - Images immediately available at capture console, and can be quickly forwarded to multiple network destinations.
 - Increased workflow and productivity
- - digital radiography (DR). Minimise disruption and downtime

CARESTREAM DRX-1 / DRX-1C SYSTEM

Detector Technology - DRX-1 Detector Technology - DRX-1C Resolution **Detector Size**

- The world's first wireless cassette-sized DR detector,

slides into existing table or

wallstand Bucky, or can be

Highlights

- New image processing software

GOS cassette size, wireless DR detector CsI cassette size, wireless DR detector 139 micron pixel pitch 35 cm x 43 cm



CARESTREAM DRX-EVOLUTION

139 micron pixel pitch

35 cm x 43 cm

Detector Technology – DRX-1 Detector Technology – DRX-1C Resolution **Detector Size**

Highlights

- -Matches DRX-1, the world's first cassette-sized DR detector with a fully automated, semi-automated or manual suite of precision x-ray equipment
- Virtually unlimited positioning freedom – including detector interchan-geability across DRX Family Suite products
- Single integrated console controls both generator and image processing.
- Supports workflow enhancing protocols such as DxIOD, IHE Scheduled Workflow and IHE Consistent Presentation of Images.
- Flexible user interface can be customised to match clinical workflow.



FUJIFILM D-EVO Wireless



Highlights

Technology

Resolution

Size

- For table, upright and portable applications
- Imaging Area: 35 cm x 43 cm
 Only 3,3 kg and 14 mm thick
- -1 Sec preview time
- Exposure cycle time: Wired mode 10sec, wireless mode 12 sec
- ISS conversion Method improves DQE & MTF significantly
- Possibility to choose between wireless and wired mode



FUJIFILM FDR D-EVO Suite GE Healthcare Brivo DR-F Technology Technology ISS indirect conversion method GOS 150 µm, 2304 x 2880 pixel 2022 x 2022 pixels, 14 bits Resolution Resolution Size 38,4 cm x 46,0 cm x 1,4 cm (W x D x H) Size 41 x 41 cm Highlights -2 sec image preview - 10 sec interval exposure time - Lightweight ceiling suspension universal flat panel x-ray room - Motorized floating top Highlights table, max. 250 kg - General purpose digital radiographic system patient load Improved workflow Motorized vertical tube – Robust - ISS conversion Method - Compact -High reliability improves DQE & MTF significantly – Easy-to-use -X-Con connection Auto tracking

RAD-BOOK 2011.

Wireless Digital Radiography. Feel the Freedom.

The more diverse your requirements, the more the CXDI-70C Wireless system has to offer. Experience it for yourself and find out why taking high-quality X-ray images is so easy with the innovative CXDI-70C Wireless system from Canon. Delivering the best image quality with lowest X-ray dose our wireless, digital radiography system supplies perfect results without the need for any detector cables. Providing you with a new level of flexibility.

We Speak Image

Camera EOS 5D Mark II | f22 / 1 / 250 | ISO 250

Visit our ECR booth for sound breaking product launches: ECR, March 4–7, 2011 Vienna, Austria/EXPO A booth number 105



CXDI-70C Wireless

canon-europe.com/medical













- execution of any exams and oblique incidences also stretchers
- Accurate full-length examination of the patient with no need
- for repositioning Total comfort for the patient and enhanced diagnostic results in any exam of the spine, thorax, legs, etc.
- Ease of installation in any diagnostics room thanks to the
- extremely compact structure and extraordinary suppleness



safe positioning Rapid and accurate execution of any oblique incidence on stretchered patients thanks to the tilting and rotating wall stand



- Unique workstation software functions



- Light handling, servo tracking standard
- The ultimate workflow in combination with AeroDR
- In-room touch screen sub monitor
- Can be installed in rooms with a minimal height of 2,5 meter





- Cost-effective and efficient DR resolution





Highlights

- Advanced DR system with advanced grid equipped with exclusive auto-focusing device
- Single detector for accurate execution of any kind of exam with no limitation even for stitching function
- Innovatory carbon-fiber tabletop ensuring 90° rotation for easy stretcher positioning
- Simple and quick installation also in small-dimension rooms
- even with ceilings of only 270 cm height from the floor
- Motorized movements ensuring full automated control of the whole system



- State-of-the-art system with single removable grid with ex-sive auto-focusing device
 Innovative completely overhanging carbon-fiber tabletop allowing examination of patient from any side
- Adjustable height-tabletop ensuring an extraordinary minimum distance from the floor of only 50 cm
- Ample variable Focal Distance

Technology

Resolution

Size

- Full-length patient examination in both vertical and horizontal

medigration DigiRoebs basic

position with Stitching function possibility

CsI or Gd2O2S

139 µm, 14 bit

3,6 lp / mm

43 x 43 cm



RAD-BOOK 2011



Mindray DigiEye 560 FPD Detector Technology Resolution 143 µm Detector Size 43 cm x 43 cm Highlights - Versatile performance with compact U-arm design

- Extraordinary flexibility makes the system ideal for different position
- High image quality with a low X-ray dose
- Intelligent-automatic image processing software system
 Seamless connect to the DICOM



- Pre-install 1,000 different examine programmes
- Full function workstation, one-step to digital
- Panoramic imaging system
- High image quality with low x-ray dose



- components: U-arm system, generator, flat panel, PC, X-ray table and the *dicomPACS*[®]*DX*-*R* acquisition and diagnostic software
- User-friendly: All the necessary adjustments can be made from one single control console



- configuration of the system dicomPACS DX-R X-ray acquisition software can be operated intuitively via touchscreen
- Professional image processing and integrated multimedia radiographic positioning guide

94 <u>DR</u>





- Automated functions such as auto collimation and move-to-
- position
- Optional wireless portable detector and PCR integration
- Easy orthopedic imaging with automatic image acquisition and stitching
- Vertical stand (moveable or fixed) with integrated detector, digital bucky table with integrated detector and ceiling-based tube carrier



- Moveable multi-purpose stand with swiveling c-arm and integrated detector, ceiling-based tube carrier and single side suspended table
- Optional wireless portable detector and PCR integration
- Optional swiveling table for better accessibility



```
Philips DigitalDiagnost with wireless portable detector
               a-Si, CsI-Scintillator
   Technology
               3k x 2.4k image matrix, 144 µm pixel size
   Resolution
        Size
               35 x 43 cm
Highlights
- The wireless portable detector is available as an additional
 detector for all DigitalDiagnost single and dual detector
 configurations
- More flexibility: The wireless portable detector carries out
 even the most difficult projections projections at table, patient
 bed, wheelchair or trolley
 More efficiency: Smooth digital workflow with instant results
 at the Eleva workspot
 More freedom: Convenient handling and high hygienic
 standards thanks to the wireless detector's cable-free design
 Optional wireless portable detector and PCR integration
```

and stitching RAD-BOOK 2011

rm III

<u>DR</u> gg



- Highly automated workflow with workstation controlled collimation, asymmetric beam alignment, automatic tracking
- Extended application range for skeletal examinations with tiltable vertical stand - Optional wireless portable detector and PCR integration



Philips Essenta DR Compact Technology Quantmaster, High Stability Scintillator (GoS) Matrix: 1920 x 2367 Resolution Size 35 x 43 cm (14" x 17"), rotatable



- Highlights
- 50 kW, 65 kW or 80 kW
- -affordable price with low cost of ownership
- Affordable handling through counterbalanced movements
- -Fits into very small rooms (height 2,50 m)
- Floor-mounted, u-arm based



- Filmless workflow with DR technology for high throughput
- Excellent image quality with UNIQUE image processing and DoseWise concept
- One room for all types of patients from infants to obese adults



96 <u>DR</u>





Shimadzu Shimadzu RADspeed DR Shimadzu Shimadzu RADspeed DR wireless * Technology Flat panel detector (a-Si) Technology Flat panel detector (a-Si) 160 microns pixel pitch Resolution Resolution 125 microns pixel pitch Size 17" x 17" (43 x 43 cm) / 14" x 17" (35 x 43 cm) / Size 14" x 17" (35 x 43 cm) 9" x 11" (23 x 28 cm) Highlights Highlights - New generation with wireless flat panel detector - Flexible choise of Excellent image quality different flat panel detectors - Auto-positioning function - Excellent image quality - Superb dose efficiency - Auto-positioning function - Seamless network integration Superb dose efficiency - Seamless network integration * system configuration available in selected countries only RAD-BOOK 2011

DR



- TOP alignment of X-ray field for dose reduction
- Automated ortho acquisition of entire spine and long legs
- Siemens Axiom Multix M Siemens Axiom Vertix MD Trauma Technology Amorphous-Silicon Technology Amorphous-Silicon with Cesium Iodide scintillator with Gadolinium Detector 160 µm, 2688 x 2208 pixel Oxysulfide scintillator Detector Size 35 x 43 cm 160 um. 2688 x 2208 pixel Size 35 x 43 cm Highlights Highlights – Universal digital radiography - Digital radiography solution with mobile flat detector
 - solution with mobile flat detector
 - Flexible and easy handling positions just like a cassette
 Electronic tomography possible (option)

Automated ortho acquisition of entire spine and long legs

- Excellent detail contrast with DiamondView

- Ceiling-mounted and floor-mounted solutions available
- Ceiling-mounted u-arm for maximal flexibility
- -X-ray tube is constantly centered to flat detector in all planes
- All exposures with one detector, in or out of the holder
- Fast image preview available within 5 seconds



- Ceiling-mounted tube with MaxTouch a color touchscreenfor enhanced workflow
- Automated system positioning and synchronised tracking of X-ray tube and detector in different planes
- Excellent detail contrast with DiamondView Plus



- system with intuitive user interface and DICOM 3.0 interfaces Comprehensive CARE dose reduction package
- Limitless projection flexibility with optional ceiling-suspended tube and wireless detector wi-D

<u>gg</u> <u>Dr</u>





Tetenal Vidix II (Dual Type)

a-Se (amorphous Selenium)

Resolution 168 µm, 14 bit, 2.560 x 2.560 pixels Size 43 cm x 43 cm (17" x 17")

Highlights

Technology

- Improved workflow and working time (fast image acquisition)
- High image quality (excellent dynamic range)
- Decrease of x-ray dose
- Cost-efficient
- Low radiation

CR/DR MOBILE



<u>CR/DR MOBILE</u> 99





- Optimized clinical workflow
- Outstanding operability
 Efficient APR function
- Fast bedside imaging
- Full Dicom compatible





IN CR/DR MOBILE



▶ IAE RTC 600

Rotating anode graphite X-ray tube, specifically designed for remote controlled tables and digital systems



Highlights

- High anode heat storage for repeated loading
- Enhanced anode heat dissipation, provided by high emittance coating and target design
- Severe tests during conditioning assure reliable performances - Ground glass window for consistent HVL
- Variety of available housings allows flexible systems
- configurations

▶ IBA Multimeter MagicMax

Simultaneous measurement of dose, dose rate, exposure time, kV, dose/pulse, pulse rate, HVL and total filtration



- Highlights
- Small device with separate multifunction detector
- Connected via USB to PC or Notebook
- Intuitive use via PC interface
- Time resolution: 100 µs
- Optimized solutions for all applications



- Dual focal spot (0.8 / 1.3 mm) for multipurpose application Anatomical programs Dose reduction
- Flat panel detector technology for high quality images and
- immediate results examination
- Touchscreen user interface -Full DICOM connectivity + WLAN

▶ IBA Dosimetry DIGI-13

Test device for checking image quality parameters at digital radiographic units



- Highlights
- Compact device with separated Al pre-attenuator
- With integrated copper plate
 Check of homogeneity, spatial and contrast resolution, size of the radiation field, artefacts - Easy-to-use

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CR/DR ACCESSORIES



- Highlights
- Checks all imaging quality parameters (dynamic range, spatial resolution, low contrast, artefacts, radiation field, etc.)
- Convenient use at bucky units
- Patient equivalent absorber (Al or PMMA) included

- Remote control, waveforms, and archiving with XLPRO Software
- Compact, easy to use

Radcal RAPIDOSE

Rapid Measurements - with a super small footprinter detector



Highlights

- For Radiography, Fluoroscopy, Mammography and Dental.
- Simultaneous dose, rate, kVp, time, HVL, filtration and waveforms
- Customizable software and easy data analysis
- Display data and waveforms exactly as you wish
- Instant scope-type waveform analysis
 Data archiving and analysis using Excel



Radcal PDC-DAP/KAP verification meter

- Highlights
 PDC (Patient Dose Calibrator)
 Use to calibrate DAP/KAP meters
 Measures and displays DAP/Rate and Dose/Rate
- Optical and radiographic alignment markers
- Simple to use with optional computer control

RTI Electronics Piranha

The Piranha is designed as a truly self-contained, all-in-one, X-ray multi-function meter that assures accurate results in one shot. kV, time, dose, dose rate, HVL and total filtration



- Fits in the Palm of Your Hand

RTI Electronics Barracuada

The Barracuda X-ray multimeter has a cabinet that can house up to six different application modules, and can measure on all modalities; R/F, mammography, flouroscopy, pulsed flouroscopy, dental, panoramic dental and CT systems



- All in One, All at Once Auto-Compensation
- Enhanced Graphical PDA Display
- R&F, Mammo, Dental and CT
- Ionization Chambers
- Built-In Bluetooth for PC and PDA
- -mAs, and Light Probes
- Fits in the Palm of Your Hand

RAD-BOOK 2011







– Extreme small footprint & gantry size

- -VUE point HD 3D iterative reconstruction
- ▶ GE Healthcare Discovery 690 ▶ GE Healthcare Discovery 600 Resolution < 2mm (w. SharpIR) Resolution < 2mm (w. SharpIR) NECR @ 6 kBq/cc NECR @ 6 kBq/cc 75 kcps @ 15 kBq/ml 110 kcps @ 20 kBq/ml Transaxial PET Field of View Transaxial PET Field of View 70 cm 70 cm Highlights Motion Free PET/CT Highlights _ - Motion Free PET/CT _ Stable timing resolution, - Optimized for gated and dynamic PETindependent of count rate Time of Flight PET acquisition
 VUE Point HD 3D iterative reconstruction with time of flight information and CT-acquisitions – VUE Point HD 3D iterative reconstruction - IBM Blade Center for fastest reconstruction - Highest NECR in clinical range - IBM Blade Center for fastest reconstruction





Philips Gemini TF PET/CT – GXL PET/CT **TF PET/CT GXL PET/CT** Peak NECR Peak NECR 210 kcps 70 kcps **PET Spatial Resolution** PET Spatial Resolution 4.3 mm 4.5 mm **CT** Configuration 16-slice or 64-channel **CT** Configuration 16-slice Highlights TF - World's first commercially available timeof-flight PET/CT - Fast scans (10 min) with Highlights GSL -Fast scans (15 min) with low dose low dose Premium Brilliance CT -Fully 3D LOR PET reconstruction image quality & applications – 190 cm PET/CT scan length - Premium Brilliance CT image quality & applications - 190 cm PET/CT scan length - Exclusive OpenView gantry design - Exclusive OpenView gantry design RAD-BOOK 2011



Siemens c.cam



- Fast return on investment

53.3 x 38.7 cm

Resolution

Sensitivity

Field of view



to 19.5 hours per month

- Broad software application spectrum

- Lower you injected dose by up to 75% - Fully automated collimator changer and quality control save up to 19.5 hours per month
ING MOLECULAR IMAGING



MOLECULAR IMAGING ACCESSORIES

Alliance Medical – flexible diagnostic imaging services



- One fully integrated MR and PET system for simultaneous
- data acquisition from both modalities
- Obtain a comprehensive diagnostic picture with only one scan
- One exam- one room one whole-body solution



Highlights

- Static diagnostic imaging centers MRI, CT, PET, PET/CT
- Interim services for bridging downtimes
- Regular "routing" services



- combination with head and body phantom





- Regular "routing" services

MOLECULAR IMAGING ACCESSORIES





JiveX Enterprise PACS Integrative Image Management Solutions

JiveX Radiology

- D Automatic Hanging Protocols
- Deresentation Workflow
- ▶ Integrated Teleradiology
- **D** 3D Workflow Integration
- ▶ Image Registration



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108 DISPLAYS / PRINTERS





- 5-year warranty

Barco Coronis 5MP Mammo





Highlights

- Pixel-perfect diagnostic precision
- Uniform luminance across the screen
- Ultra-fast image processing
 Transparent calibration and QA
- 5-year warranty

Name

Size

Technology

Resolution

Highlights

- Full breadth of surgical and

- High Definition image quality

- Easy cleaning and disinfection

- Approved for medical use

endoscopy displays





Highlights

- Providing consistent DICOM

images anywhere, anytime

Professional LCD Quality

Approved for medical use - Backlight output stabilization - User-friendly Quality Assurance











- First medical displays worldwide including true 12-bit image
- grayscale transfer in the processing line Easy and fast installation; IMAGE DISPLAYS are calibrated
- twice before delivery - Intelligent self-diagnosis function for precise luminance and DICOM calibration
- Excellent image quality even in light rooms

- High-res medical diagnostic display for professional users
- Designed for Mammography readings
- Excellent image quality even in light rooms - First medical displays worldwide including true 12-bit image
- grayscale transfer in the processing line Intelligent self-diagnosis function for precise luminance and
- DICOM calibration



<u>DISPLAYS DISPLAYS</u> Dome E2, E3 - by NDSsi Dome E2cHB, E3cHB, E4c - by NDSsi 1 MP 1 MP GS E2 2 MP 2 MP E2colour 3 MP GS E3 3 MP E3colour 4 MP 4 MP E4colour 5 MP 5 MP Highlights - RightLight-guaranteed lifetime DICOM calibration Highlights High-Bright Diagnostic color displays -di - RightLight-guaranteed lifetime DICOM calibration - Suitable for both grayscale and color images – Uncompromised, perfect image quality – Diamond standard for high-end radiology for X and Uncompromised, perfect image quality Diamond standard for general radiology and color engeneral radiology – Fanless display, lightweight, low-power – High-bright 2 MP & 3 MP 10-Bit grayscale display hanced diagnostics Fanless display, lightweight, low-power High-bright 2 MP, 3 MP and 4 MP 10-Bit color display DVI 2MP W 5YR 10YR DVI





Dome CxtraWeb - by NDSsi

- Highlights
- Offers web based management of Dome displays across the enterprise
- Increases productivity, reduces downtime +ensures consistent image quality
- REPORTING: Manages clinical and diagnostic workstations remotely, collects and summarizes data into organized, easy to understand

2

- reports, such as display conformance and asset management reports - ACCESS: The straight forward, web based interface and accessibility
- provides a reliable software solution from anywhere - RELIABILITY: Provides alerts for events that could disrupt display performance such as if a display is down or if conformance is not met COMPLIANCE: With its extensive data collection and Reporting
- system, maintaining compliance with regulatory requirements is effortless



- support »Super high resolution« of 15 megapixel
- Supports 5 megapixel videobards thanks to ISD technologie Luminance uniformity correction Remote calibration and management
- New developed AR coating for an improved resolution
- Increased lifetime with backlight dimming system



PRINTERS



114 <u>PRINTERS</u>





320 dpi - 126 cm spatial resolution, 4096 pixel contrast resolution, shades gray Direct thermographic (grayscale) and dye-diffusion

PRINTERS

► CPS – Codonics Horizon Ci / GS / SF

Highlights

- Read in room light with convenient grayscale or color paper (Ci, GS and SF)
- Outstanding image quality, prints on all standard sizes of clear/blue dry film
- Compact design with the fastest print speed in its class
- Economical sunrise express swap warranty provides a replacement imager
- Network printer with up to 24 DICOM connections, no additional hardware required
- Validated with all major OEMs, modalities, PACS and workstations



Horizon Ci Speed 100 sheets/h Capacity 300 copies Resolution 320 dpi – 126 cm spatial resolution, 4096 pixel contrast resolution, shades gray System Direct thermographic (grayscale) and dye-diffusion (color) Horizon GS Speed 100 sheets/h 300 copies Capacity Resolution 320 dpi – 126 cm spatial resolution, 4096 pixel contrast resolution, shades gray System Direct thermographic (grayscale) Horizon SF Speed 100 sheets/h

Capacity 3 Resolution 3 System 1

sity 300 copies ion 320 dpi – 126 cm spatial resolution, 4096 pixel contrast resolution, shades gray em Direct thermographic (grayscale) and dye-diffusion (color)

CPS DICOM PaperPrint Server						
Color Laser Printer Copier Scanner Paper sizes	ColorQube 9201 yes yes A3/A4	WorkCentre 7545 yes yes A3/A4	WorkCentre 7425 yes yes A3/A4		 Highlights Full DICOM 3.0 Basic Grayscale and Color Print Management Management 	
Print resolution Printout	and many other 2400 x 2400 dpi color, black & white	and many other 1200 x 2400 dpi color, black & white	and many other 1200 x 1200, 1200 color, black & whi	D x 2400 dpi ite	 Single licence for unlimited number of modalities and printers Individual header and footer including text and graphic logos Individual LUT in color and black&white for every modality, user and printer 	
Color Laser Printer Copier Scanner Paper sizes	Phaser 7760 - - A3/A4	Phaser 7500 - A3/A4	Phaser 5550 - - A3/A4		 Frint-Presentation-LOT full immediate online- support for printer , server and software by CPS Low average cost per 	
Print resolution Printout	and many other 1200 x 1200 dpi color, black & white	and many other 1200 x 1200 dpi color, black & white	and many other 1200 x 1200 dpi black & white		page, about 1 cent in black&white and 8 cent in color	





RAD-BOOK 2011 .

PRINTERS]]



- Exceptional long print format possible (100 x 450 mm)
 New high-gloss thermal paper
- Optimised heating process thanks to Print Control Engine
- Compact and ergonomic design
- High-speed USB interface (Version 2.0)
- Large integrated paper tray - Illuminated paper exit slot
- Tetenal Printing Solution II ▶ Tetenal Printing Solution II HP 2800 (A3+, A3, A4, A5, A6) HP 1000 (A4, A5) Printing Technology 4800 x 1200 dpi 4800 x 1200 dpi Resolution b/w 111 Highlights Highlights - High resolution quality - low costs - High resolution quality - low costs - High density - High density - Fast-drying - Fast-drying - Water-resistant Water-resistant - Transparent + solid printouts - Transparent + solid printouts

DISPLAYS/PRINTERS ACCESSORIES

CPS – Codonics Virtua Medic	al Disc Publisher
	 Highlights Burns up to 60 CDs or 30 DVDs an hour Auto records patient studies and reports without tying up workstation or employee resources Touchscreen interface for optimized workflow Full-color disc labels creator DICOM compliant network appliance Burn speeds based on a typical clinical study with full color label. Not all features available on all models. Specifications subject to change
Capacity Drives/Recordable Format Printer	Virtua Medical Disc Publisher Two 50-disc input bins; 100 disc total capacity 30 CDs/15 DVDs per hour DVD-R / CD-R dual-layer drives Inkjet 4800 dpi
Capacity Drives/Recordable Format Printer	Virtua XR Medical Disc Publisher Two 50-disc input bins; 100 disc total capacity 30 CDs/15 DVDs per hour Two dual-layer, DVD-R / CD-R drives Inkjet 4800 dpi

CPS – Codonics DiscImporter Integrity

User Interface Remote web browser access DICOM 3.0, IHE PDI, ACR NEMA, older DICOM image files **Import Formats** Processor Intel® CoreTM 2 Duo Search Rules Configurable 6.49" (16.5 cm) W, 6.49" (16.5 cm) D, 1.96" (5 cm) H Dimensions Weight 2.41 lbs. (1.46 kg)

Highlights

- Compact, stand alone solution to read, reconcile and store medical studies from CD/DVD
- Improves workflow by bringing the reconciliation process to the user
- -Automatically scans for
- Reconciles patient data
 with facility's own

modality worklist - Displays the original

imported data as well as the matching MWL or PACS data

▶ IBA Dosimetry LXcan

Spot luminance meter for quality tests at displays



Highlights

- Luminance and illuminance measurements
 Display: 1.2" TFT
- Targeting device: integrated camera
- Ultrasonic distance sensor; alignment sensor
- USB interface







<u>עודדאsound</u> וו



CHISON iVis 30 Mode B,2B,4B,M,B/M,B/BC, CFM,PD, Directional PD, Mode B,2B,4B,M,B/M Scan format Linear, Convex, Micro-convex Instant Triplex, 3D, 4D Scan format Transducer Convex, linear, micro convex Transducer 2 inputs inputs 3 Highlights - Higher price performance, affordable for each doctor. - Multiple applications including Abdomen, OB/GNY, Urology, • Highlights – Full digital beam-former GP, Small parts, etc. Omni- compounding imaging - Harmonic imaging

- Multiple Beam Parallel Technolo-
- -Real-time 3D(4D) imaging

- Ergonomic imaging
- Enhanced image and cine storage
- -USB ports, DICOM



ULTRASOUND

Esaote MyLab Twice					
	Modes Scan format Transducer inputs Highlight – 19" LCD – HF imagii – XView, C QIMT, Fu MyLabDe – DICOM, - Satellite s	B-mode, M-mode, color, high sensitivity power doppler, PW-, CWdoppler, TEI, TVM, CMM, TP-View, VPan 3D/4D linear & convex 4+1 probe connectors LA, CA, PA, microconvex, pencil s monitor ng 18 MHz ompound Imaging nTI, Elastographie, sion Imaging, sk 4 USB ports, 500 GB, ystem			

Scan format Transducer inputs

Modes

B mode, M mode, Color Doppler, Power Doppler, Pulsed Wave Doppler linear, convex and sector scanning 1 for main unit, 3with MTP cart (option)

- ► Highlights 12" LCD display, full-screen display of images
- Image optimization at the
- Inage optimization at the push of a bottom
 Lightweight 4,5 kg, 30 sec boot up time
 Operated for up to an hour
- with optional battery
- -High scalability (USB,
- HDMI, network ports) Purpose based layout and large buttons for high intuitive
- operability
- High operability using touch panel
 High-end cosmetics with piano white finish

FUJIFILM Fazone CB Cart

SONO TOUCH

When TOUCH meets Ultrasound













- Simple: image within your finger's reach
- Quality: advanced technologies meets super images
- Compact: travel in your handbag
- Powerful: battery powered
- Vasitile: sit, stand, arm-held, mounted...
- Hi-tech: designed in USA



CHISON MEDICAL IMAGING CO., LTD T: 0086-510-85310593 / 85310937 F: 0086-510-85310726 E: export@chison.com.cn WWW.CHISON.COM.CN



- ► Highlights Small, lightweight, and high portability means it can be used anywhere
- Can be lifted or lowered simply by pulling the side lever
- CB main unit can easily be attached or removed simply by pulling the front lever
- Monochrome printer or colour printer (optional)
- Keyboard (optional)
- Operates for up to an hour without external power supply



RAD-BOOK 2011

<u>אן ULTRASOUND</u>

▶ GE Healthcare LOGIQ E9		▶ GE Healthcare Voluson E8			
	Modes	B-Mode, M-Mode, CFM- Mode, Doppler, Ampli- tuda modulated contrast		Modes	B-Mode, M-Mode, CFM- Mode, Doppler, HD-Flow, Pagitime4D
	Scan format	mode, Realtime4D Linear, convex, microconvex, sector		Scan format	Linear, convex, microconvex, sector phased array
1.00	Transducer	phased array, trapezoid		Transducer inputs	3
	 Highlights Matrix arra 3D/4D Vol Depth inde imaging tha modulation True spatia CT/MRT Ir ultrasound Volume naw Agile, adap Elastograph 	<i>4</i> y transducer technology ume scan pended contrast inks to new amplitude technology l image fusion of nages and realtime <i>v</i> igation tive beamformer		 Highl Realtimes/s Auton STIC the fee CRI (Imagi HD-F Power 	ights me 4D up to 40 volu- ec. natic volumetric analysis (Realtime 4D view of tal heart) Compound Resolution ng) low (high sensitive • Doppler)







RAD-BOOK 2011

GE Healthcare LOGIQ A5 / P5 Premiun

Modes	Modular configurable
	from b/w system up to
	color triplex system
	(B-Mode, M-Mode, CFM-
	Mode, Doppler, B-Flow,
	cardiology)
Scan format	Linear, convex,
	microconvex, sector
	phased array, trapezoid
Transducer	
inputs	3
Highlights	8
- Compact l	ightweight and modern
design wit	h 15" LCD monitor

- design with 15" LCD monitor – CrossBeam and speckle reduction Imaging
- Imaging – LOGIQView (panoramic imaging) – Auto optimize (for B-Mode, color, Doppler)
- Digitally archive with RawData
- support – Elastography (LOGIQ P5 Premium)

<u>ULTRASOUND</u> עובד



▶ GE Healthcare Vscan

Modes	Black and white mode for displaying anatomy in real-time			
Scan format	Color-coded overlay for real-time blood flow imaging Field-of-view for black and white imaging: up to 75 degrees with maximum depth of 25 cm			
	The color flow sector represents blood flow within an angle			
Weight	of 30 degrees 390 g (unit and probe)			
Highlights				
- The size of a	a smart phone,			
Vscan ultrasound is helping				
redefine the speed and depth				
of patient care.				
- Patient imaging- immediately and				
non-invasive	ely – during the physical exam			

- Visually validate what you feel and hear.
- Diagnose more quickly and confidently to determine the best
- course of treatment.
- Connect more deeply with patients for better care.
- Small and lightweight, Vscan slips easily into a lab coat pocket
- The ample battery capacity provides over one hour of scan-
- ning on a single charge

vscan



B & M Mode; Omni Directional M Mode; PW & CW Doppler; Dual Gate Doppler; Colour & power Doppler; Fine Flow Mode; Triplex Mode; TDI; Elastography; Contrast harmonic imaging; Freehand3D/4D; Real-time Virtual Sonography; Real-time Bi-plane Sector, linear and convex array, 360° scanning, trapezoid, B-steer, dual imaging, wideview panoramic, HI definition Zoom, Pan Zoom; Picture in Picture

- Award-winning, unique ergonomic design gives increased system flexibility
- 3 types tissue harmonic imaging (6 choice of frequencies)
 Tissue adaptive filtering, HI Rez+ (6 levels) for speckle & noise reduction
- Tissue adaptive intering, HI Ke2+ (6 levels) for speckle & holse reduction
 Compound imaging, HI Com (from multiple directions and different frequencies)
- Graphical User Interface incorporating Smart Tab menus, Image Thumbnails and Touch Screen panel for image optimisation

▶ Hitachi Medical Systems EUB-7500 HV



B & M Mode; Omni Directional M Mode; PW & CW Doppler; Dual Gate Doppler; Colour & power Doppler; Fine Flow Mode; Triplex Mode; TDI; Elastography; Contrast harmonic imaging; Freehand 3D/4D; Real-time Virtual Sonography; Real-time Bi-plane Sector, linear and convex array, 360° scanning, dual imaging, wideview panoramic, HI definition Zoom, Pan Zoom; Picture in Picture

3 active ports

- Highlights
- 3 types tissue harmonic imaging (6 choice of frequencies)
- Tissue adaptive filtering, HI Rez+ (4 levels) for speckle and noise reduction
- Compound imaging, HI Com (from multiple directions and different frequencies)
- Option of waterproof remote control operation and voice-activated Bluetooth operation
- Compatibility with wide range of transducers including endoscopic/ bronchoscopic options

Hitachi Medical Systems HI VISION Aviu

Modes

Scan format

Transducer

inputs

B & M Mode; Omni Directional M Mode; PW & CW Doppler; Colour & power Doppler; Fine Flow Mode; Triplex Mode; TD1; Elastography; Contrast harmonic imaging; Freehand 3D/4D Sector (phased), linear, and convex array, 360° scanning, trapezoid, B-steer, dual imaging, Wideview panoramic, HI definition Zoom, Pan Zoom; Picture in Picture

3 active ports

Highlights

- 3 types tissue harmonic imaging (6 choice of frequencies)
- Tissue adaptive filtering, HI Rez+ (6 levels) for speckle & noise reduction
 Compound imaging, HI Com (from multiple directions and different frequencies)
- Graphical User Interface incorporating Smart Tab menus, Image Thumbnails for image optimisation
- PSS, patient specific scanning selector

124 ULTRASOUND



Highlights

- 3 types tissue harmonic imaging (6 choice of frequencies)
- Tissue adaptive filtering, HI Rez (4 levels) for speckle and noise reduction Option of waterproof remote control operation and voice-activated Bluetooth operation
- Compatibility with wide range of transducers including endoscopic/ bronchoscopic, surgery and urology options
- Real-time tissue elastography for breast, prostate, pancreas, thyroid, musculoskeletal, and many more



B & M Mode; Omni Directional M Mode; PW & CW Doppler; Dual Gate Doppler; Colour & power Doppler; Fine Flow Mode; Triplex Mode; TDI; Elastography; Contrast harmonic imaging; Freehand 3D/4D; 4D with elastography Real-time Virtual Sonography; Real-time Bi-plane Sector, linear and convex array, 360° scanning, trapezoid, B-steer, dual imaging, wide-view panoramic, HI definition Zoom, Pan Zoom; Picture in Picture

4 active ports

Highlights

- Award-winning, unique ergonomic design gives increased system flexibility - Graphical User Interface incorporating Smart Tab menus, Image Thumbnails and Touch Screen panel for image optimisation
- Advanced signal processing for allround high performance imaging
- Standard package includes tissue elastography and contrast imaging modes - Supports leading edge technologies such as 4D elastography and cont-
- rast quantification packages

- Context dependent Softkey,

patients(obese,old,etc) iView, image management - DICOM storage SCU

Powerful report graph/text function
 4B images for OB AFI calculation

- THI for TDP technically difficult

intuitive, efficient



- Highlights
- Quick image save, batch transferred
- to USB stick
- Context dependent Softkey, infuitive, efficient
- Powerful report graph/text function
 4B images for OB AFI calculation
- THI for TDP technically difficult patients(obese,old,etc)

RAD-BOOK 2011.

If imaging is your arena



ACCUVIX XG Ultrasound system

Medison wants to give you an easier way to acquire more information, with greater confidence in your daily practice. The Accuvix XG empowers you through advanced image quality, extensive automation, an innovative user interface and an ergonomic design. Experiencing the Accuvix XG will enable you to see beyond previous imaging boundaries, and provide better patient care.

For more information: Sales @medison.com For live demostration: Come visit us during ECR ECR 2011 03 - 07 March 2011 Visit us at MEDISON booth Expo E/ Booth#540



ואס <u>ULTRASOUND</u>





- Highly sensitive directional Power Doppler
- Elastoscan, CEUS

▶ Medison Sonoace X6

Mode Scan format Transducer inputs	B-mode, Tissue- and Pulse inversion Harmonic Imaging, DynamicMRTM, M-mode, Anatomical M-mode, CFM-mode, Power Doppler, Spectral Doppler (PWD/CWD), Pulsed Wave Tissue Doppler Imaging Linear, trapezoidal, compound linear, convex, micro convex, 3D convex, phased array sector and pencil 3 + 1
 Highlights Economical digital color Full Spectru Harmonic In Color and P Free hand 3 High resolu 	multi-speciality ultrasound system mTM and Tissue naging ower Doppler D imaging tion (LCD monitor)

Mode Scan format Transducer inputs	B-mode, Dynamic MR, Dynamic MR plus2.0, M-mode, color m-mode, arbitrary m-mode, color doppler, power doppler, directional power doppler, spectral doppler(PW,CW), tissue doppler imaging-mode, volume-mode(3D/4D, XI, MXI) Linear, trapezoidal, compound Linear, 3D linear, convex, micro convex, 3D convex, phased array sector and pencil 3 + 1
 Highlights Multi-specia system HD volume Live 3D wit 3D XI and 3 3D XI STIC 9" wide LEI 	ality live 3D/4D ultrasound imaging h extreme volume rates 3D Multi-eXtended Imaging V VOCAL, XI VOCAL D touch screen control

- Auto IMT, CEUS, Elastoscan

(800 x 480 x 24bits)

<u>ultrasound</u> עו







128 <u>ULTRASOUND</u>



Mindray DP-50 iClear, iBeam, iTouch, Phase Shift Harmonic Imaging Technology B,2B,4B,B/M,M Mode Scan Format Convex,Linear,endovaginal Transducer inputs 2-14MHz

• Highlights - High resolution 15" LCD screen

- Brilliant industrial design Advanced imaging technology
 Intelligent workflow

- Rechargeable battery

	▶ Mindray M5
Technology Mode	Microsoft Windows XP Empeded B/M/Color Doppler Velocity/ Power (DirPower) /PW/ CW/ Smart 3D / iScape (panoramic imaging) Linear, Convex, Phase, Endocavity
Scan Format Transducer inputs	2-15 MHz

Highlights THI

- THI
 Beam[™] Spatial compounding imaging
 iClear[™] Adaptive Speckle Suppression Imaging
 iTouch[™] Intelligent Image Optimization
 iZoom[™] Autoatically expand the image to full screen
 iStation Powerful patient data managment platform

	▶ Mindray M7		Philips iU22 xMATRIX	
Technology	Microsoft Windows XP Professional with ASIC Design Platform	Modes 2D, M-mode, color Doppler, Spectral Doppler, PW Doppler, CW Doppler Tissue Doppler, live		
Mode	B / M / Anatomical M / Color Doppler Velocity / Power (DirPower) / PW / CW / Smart 3D / Static 3D / 4D / iScape (panoramic imaging) / TDI (Tissue Doppler imaging) / Color M(CM)	xPlane, Live Volume, Live 3D Echo, 3D/4D an MPR, Color Power Angio, contrast, Tissue Har- monic Imaging, Freehand 3D, STIC and iSTIC, elastography		
Scan Format	Linear Convex Phase Endocavity Volume	Scan Format	Curved volume linear sector xMATRIX	
Transducer inputs	2-15 MHz	Transducer Inputs	3	
 Highlights Phase shift T iBeam[™] Spainaging iClear[™] Ada Suppression iTouch[™] Int Optimization iZoom[™] Au the image to iRoam[™], 80 data transfer 	THI tial compounding uptive Speckle Imaging elligent Image n toatically expand full screen 2.11b/g wireless r solution	 Highlights Superb imaging Simultaneoris scanning in imaging Outstanding AD, MPR, I the touch of Full range of minal, Ob/O vascular, interpretation 	ge quality, even on technically patients us high resolution, real time two planes with Live xPlane g versatility - go from 2D to 3D, Live xPlane and Live Volume at f a button of applications, including abdo- Gyn, TCD, MSK, cardiology, terventional, and small parts	
RAD-BOOK 201	11			

ULTRASOUND



- Exceptional results, even on technically challenging patients - Support for general imaging, Ob/Gyn, vascular, breast, inter-
- ventional, and cardiology exams

Applications include abdominal, Ob/ Gyn, MSK, cardiology, vascular, small

parts, and emergency medicine

Philips HD11 XE			Philips HD11			
Modes 2D, M-mode, Anatomical M-mode, color Doppler, Spectral Doppler, PW Doppler, CW Doppler, Tissue Doppler, 3D/4D and MPR, Color Power Angio, contrast, Tissue Harmonic Imaging, Free- hand 3D, stress echo, STIC			Modes Scan Format Transducer Inputs	2D, M-mode, color Doppler, PW Doppler, Color Powr Angio, High PRF, Tissue Harmonic Imaging Curved, linear, sector 5		
Scan Format Transducer Inputs Highlights High defini bined with Powerful, c vations des clinical env Superb ergr Fully equip of applicati imaging, ca Ob/Gyn 	<i>Curved, volume, linear, sector</i> 5 tion imaging com- intuitive design linically proven inno- gned to match your fronment nomics and mobility ped to cover a range ons including general rdiology, vascular, and		 Highlights Versatile pla high definiti Clinical app general imag vascular, and 	tform built for on performance lications include ging, Ob/Gyn, d cardiac		

- 2D, M-mode, Anatomical M-mode, color Doppler, Modes PW Doppler, CW Doppler, High PRF, Tissue Doppler, 3D/4D, Color Power Angio, elastography* Scan Format Curved, volume, linear, sector Transducer Inputs 4 Highlights - Outstanding clinical performance to support confident diagnosis Versatile and easy to use 3D and 4D capability - Designed for optimal workflow and reliability in busy practices Clinical applications include abdominal, Ob/Gyn, breast, pediatric, vascular, cardiology, MSK, urology, critical care
 - *in some regions

Philips HD7 XE 2D, M-mode, Anatomical M-mode, color Doppler, Modes PW Doppler, CW Doppler, Tissue Doppler, 3D grayscale, Color Power Angio, contrast, Tissue Harmonic Imaging, stress echo Scan Format Curved, linear, sector Transducer Inputs 4 Highlights Sophisticated technologies and user-centric design facilitates exams in a wide variety of clinical settings - Advanced features for streamlined workflow Easy to learn and use for all levels of experience Full range of applications, including abdominal, Ob/Gyn, vascular, cardiac, MSK

III ULTRASOUND



nuing performance, even with high user volume

> Doppler M-mode Curved array, phased array, linear, endocavity, 3D/4D imaging, pencil

- 3D/4D imaging

imaging

gy

- High-end ultrasound system

application with eSieTouch elasticity imaging and fatty

tissue imaging technologies Cadence CPS Contrast enhanced

Hanafy lens transducer technolo-

- Advanced breast imaging

B-mode, Color Doppler, Power

Doppler, PWDoppler (Duplex, Triplex), Doppler Tissue Imaging (Color and PW), CW spectral Doppler, M-mode and Color

- MultiHertz multiple frequency

pounding with dynamic TCE

imaging technology Advanced SieClear spatial com-

technology Advanced fourSight technology TEQ ultrasound technology: Clarify

vascular enhancement technology, syngo auto OB measurements

Modes	B-mode, Color Doppler, Power Doppler, PW Doppler (Duplex, Triplex),		Modes
	Doppler Tissue Imaging (Color and PW), CW spectral Doppler, M-mode and Color Doppler Mmode		Scan format
Scan format	Curved array, phased array, linear, endocavity, 3D/4D imaging, pencil		Transducer inputs
Transducer inputs	3	_	Highlights

Highlights

TCD and cardiac

- Advanced transducer technology including micro-pinless connectors, Hanafy lens and matrix arrays, and silicon-ready – Advanced breast imaging application with eSieTouch elasticity imaging and Fatty Tis-sue Imaging technologies including option to add ABVS Automated Breast (see Mammography)
- Advanced SieClear spatial compounding with dynamic TCE wtechnology with speckle reduction in 3D
- Advanced fourSight technology
- Automatic measurement of lesions with syngo e-Sie Calcs native tracing software

Modes B-mode, Color M-mode, M-Modes B-mode, Color M-mode, M-mode, Color Doppler Velocity mode, Color Doppler velocity mode, Power Doppler mode, mode, Power Doppler mode, Pulsed Wave spectral Doppler Pulsed Wave (PW) spectral Doppler mode, CW Continuous mode (PW), Continuous Wave Wave spectral Doppler mode spectral Doppler mode (CW), Scan format Phased array, curved array, Duplex mode, Triplex mode Scan format Curved array, phased array, linear, endocavity, linear array Transducer inputs endocavity, 3D/4D imaging 3 Transducer inputs Highlights Highlights - Hanafy lens transducer technology - Excellent imaging performance through excellent detail and contrast resolution - Tissue harmonic imaging - DTI Doppler tissue imaging capability high temporal resolution in 2D TGO tissue grayscale optimization Multi-beam formation technology Streamlined clinical workflow with integrated DIMAQ-IP workstation, technology for more consistent image quality High quality 4D imaging through Advanced fourSight technologies a user customizable control panel, and TGO tissue grayscale -Exceptional clinical performance across a variety of optimization technology ErgoDynamic imaging system design with flat panel display applications and patient body types - Easy-to-use ErgoDynamic imaging system design and articulating arm

U<u>LTRASOUND</u>]]]



with highly functional ergonomics





SonoScape CO., Ltd

Yizhe Building, Yuquan Road, Nanshan, Shenzhen, Guangdong, 518051, China TEL: 86-755-2672 2890 FAX: 86-755-2672 2850 E-mail: sonoscape@sonoscape.net www.sonoscape.com

132 ULTRASOUND

µ-scan Processing multiple-beam processing Technology B-mode, Steer M-mode, TDI, CFM, PDI, PWD, CWD, Mode 3D/4D, Color M-mode, Tissue Doppler Imaging Linear, Convex, Micro Convex, Phased Array, Scan format Bi-plane, Volume Convex, Intraoperative Transducer

Transducer inputs

Highlights

- 10.4 inch smart touch screen
- High density transducers with frequency ranges from 1.9 to 15MHz
- 200° transvaginal imaging with temperature-detection technology for endocavity transducers
- Integrated with state-of-the-art technologies, like μ -scan, multiple-beam processing, IMT, B-Steer, automatic flow volume analysis
- Full patient database solutions: DICOM3.0, AVI/JPG, USB2.0, HDD,
- DVD, PDF report



µ-scan Processing B-mode, Steer M-mode, TDI, CFM, PDI, PWD, CWD, 3D/4D, Color M-mode, Tissue Doppler Imaging Linear, Convex, Micro Convex, Phased Array, TEE

Highlights

Transducer inputs

Technology

Scan format

Mode

- High density transducers with frequency ranges from 1.9 to 15MHz
- Integrated with state-of-the-art technologies, like µ-scan, IMT, B-Steer, multiple-beam processing, automatic flow volume analysis, 4D imaging technology



- Comprehensive cardiovascular analysis kits: TDI, Steer M,
- Color M; CW, HPRF, Panoramic image Built-in high capacity lithium battery
- Full patient database solutions: DICOM3.0, AVI/JPG,
- USB2.0, HDD, DVD, PDF report
- Sonoscape SSI-8000 Technology µ-scan Processing Mode B-mode, Steer M-mode, TDI, CFM, PDI, PWD, CWD, Scan format

3D/4D, Color M-mode, Tissue Doppler Imaging Linear, Convex, Micro Convex, Phased Array, TEE, Volume Convex

Transducer inputs

4

Highlights

- Full range of cardiovascular transducers: Adult TEE, Pediatric TEE, Phased, Highfrequency linear
- High density transducers with frequency ranges from 1.9 to 15MHz
- Cardiovascular analysis kits: TDI, Steer M, Color M, CW, HPRF, Panoramic image
- Integrated with state-of-the-art technologies, like µ-scan, multiple-beam processing, IMT, B-Steer, automatic flow volume analysis, 4D imaging technology
- Full patient database solutions: DICOM3.0, AVI/JPG, USB2.0, HDD, DVD, PDF report



Highlights

- Clipboard function for quick patient image capture and review
- 3D imaging compatible with all transducers
- Full patient database solutions: DICOM3.0, AVI/JPG,
- USB2.0, HDD, DVD, PDF report

Sonoscape A8	▶ Toshiba Aplio XG
W, M, B/B, Tissue Harmonic Imaging onvex, Micro Convex	Modes2D, 3D, 4D, M modes; PW/CW Doppler; high PRF; color flow DopplerScanLinear, convex, matrix, and phased arrays; biopsy & 4D
e transducer wide General, Urology, letal both Convex & Convex) ion e with a Technology th M-Tuning ration solutions: USB2.0.	 Transducer inputs Transducer inputs Highlights Precision Imaging, MicroPure and Elastography ApliPure Plus: Advanced realtime compound imaging Differential THI: better resolution and depth of penetration Contrast imaging: Low MI, VRI, microflow imaging Whole body 4D imaging with linear and convex transducers; Volume view; Multiview Acoustic Structure Quantification: fibrotic tissue change assessment

- CHI-Quantification, TDI-Quantification

Mode

Scan format Linear, Co Transducer inputs 3

4B. B. B/

Highlights

Technology

- Fifteen comprehensive choices, supporting a range of applications: Radiology, OB/GYN, Pediatric, Musculoske
- Bi-plane transducers (& Linear and Convex for urological applicat - 180° endocavity probe
- Temperature-detection - Intuitive operation wit
- one-key image optimiz - Full patient database s
- DICÔM3.0, AVI/JPG, 160GHDD, PDF report



ULTRASOUND 133







134 <u>ultraso</u>und



Mode B, Color Doppler, PW, CW, Dual/Quad images, 3D, 4D, Panoramic, Harmonics, Elastography option Scan Format Linear, Convex, Microconvex, Phased Array, Endocavity Transducer inputs 3 Highlights - Customizable touch screen - see only the buttons you need

- Application-specific packages Anesthesia, Critical Care, IVF and more Elastography option
 SonixVCR Onboard Digital Video Recording
- SonixGPS option for biopsies
- Shared Services System
- -90-minutes battery option
- -17" LCD Monitor and Console
- with Touch screen
- Premium Image Quality
- Online Software Updates
- Optional ECG Module
- -www.ultrasonix.com/SonixTOUCH



Mode B, Color Doppler, PW, CW, Dual/Quad images, Panoramic, Harmonics, Elastography option Scan Format Linear, Convex, Microconvex, Phased Array, Endocavity Transducer inputs Highlights - Customizable touch screen see only the buttons you need Application-specific packages – Breast, MSK, L&D Easy to use SonixVCR Onboard Digital Video Recording – 90-minutes battery option – 17" LCD Monitor and Console with Touch screen

- Premium Image Quality
- Online Software Updates

Mode

Scan

inputs

-www.ultrasonix.com/SonixTABLET



▶ z.one *ultra* Zone Sonography Technology 2D / B- & M-Mode,

Tissue Harmonic Doppler Imaging, Compound Harmonics, Color- and Color Power Doppler, PW- & CW-Doppler, Simultaneous Dual Imaging, 3D-Imaging, Elastography, Real-Time Triplex, Contrast Imaging Curved Array (Micro-convex), Linear Array, Phased Array, Virtual Apex Array (trapezoidal), TEE 1 - Z.ONE Scan Engine only (hand-held use)

3 - Z.ONE ultra or ultra sp (Scan Engine or Scan Module combined with SmartCart or SmartCart SP Workstation)

Highlights

- ZST Zone Speed Technology
- ZSI Zone Speed Index AUTO-OPT Automatic Optimization
- IQ Scan / Retrospective Imaging (The Virtual Patient)
- Utilizing the power of DSP Digital Signal
- Processing chip technology Convertible / Hybrid Ultrasound Concept
- Battery Pack for SmartCart Workstations

RAD-BOOK 2011.

CIVCO eTRAX Needle Guidance System

eTRAX allows physicians safe and precise placement of instruments in the interventional suite by tracking the tip of the needle using electromagnetic technology in real-time navigation.

CIVCO Ultrasound Transducer Covers

135

CIVCO's CIV-Flex™ Transducer Covers have been recommended for three decades as the latex-free cover of choice and are a reliable way to provide patient and staff safety and prevent the spread of infection.

Highlights

- Enables precise percutaneous targeting of lesions without radiation or open surgery
- Ideal for ablations, core tissue biopsies, drainage, fluid
- aspirations, therapeutic delivery, vascular access and anesthesia Accepts 18 GA or smaller instruments
- Compatible with validated ultrasound equipment and software only
- Additional needle lengths coming soon

Highlights

- Offers extended sterile protection when performing puncture Soft, pliable, distortion-free, latex-free material.
 Available telescopically-folded for easy application to
- transducer and in extended lengths of 36 to 96 inches. Select covers offer a three-dimensional box end.

Siemens ACUSON S2000 Automated Breast Volume Scanner



CIVCO's needle guidance systems offer physicians reduced technique variability, a shorter learning curve and reduced procedure time during ultrasound-guided procedures. They are designed for use with ultrasound systems from leading equipment manufacturers.

Alliance Medical13

Carestream Cover

Eizo53

Hitachi19

Hologic61

IBA Dosimetry 49,67

Konica Minolta Title

Highlights

- Ultra-Pro II Needle Guide is designed for ultrasound-guided procedures including catheter placement, core tissue biopsy,
- AccuSITE™ Needle Guide is a transverse guide designed specifically for guidance in central line placement procedures.
 Infiniti™ Needle Guide offers a unique open channel with infinite angle capabilities and is ideal for deep or shallow access applications including breast biopsy and regional anesthesia.



Highlights

- Ideally suited to image patients with dense breast tissue and/ or a history of breast disease
- Acquisition of full-field volumes of the breast automatically, quickly and comfortably
- Efficient and comprehensive analysis of the volume data Comprehensive BI-RADS reporting capabilities
- Patient friendly minimal compression
- No radiation

Landwind85

Medison125

Philips15

RTI Electronics AB 64,77

Schiller23

Shimadzu Cover

Siemens43

INDEX OF ADVERTISERS

SonoScape	
Telepaxx	Cover
Tomovation	
Toshiba	11
Ulrich	47
Visus	
VITAL Images	Cover
XGY	Cover

136 SUPPLIERS	<u>5/</u>	RIS	PACS	Workstations	Computed Tomography	Magnetic Resonance	Injectors	Interventionelle Systeme	Mammography	R/F	Bone Densitometer	CR	DR	Molecular Imaging	Display Systems	Printers	Ultrasound
Agfa HealthCare Septestraat 27 2640 Mortsel, Belgium Ø +32 3 444 94 44 www.agfa.com	AGFA 🝻 HealthCare	2	2	143	20				10, 63			82	86, 98			113, 114	
Alliance Medical Interim Solutions Iceni Centre, Warwick Technology Park, Warwick, CV34 6DA, UK \emptyset +44 (0)192 648 2000 www.allianceinterim.com www.alliancemedical.eu	Alliance Medical				17	31								106			
Apelem Parc Scientifique Georges Besse 175 allée Von Neumann 30035 Nîmes Cédex 1, France Ø +33 (0)4 66 29 09 07 www.apelem.com										71			86				
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Canon Europa NV PO Box 2262 1180 EG Amstelveen, The Netherlands Ø +31 20 545 8831 www.canon-europe.com/medical	Canon												86, 87				
CARESTREAM HEALTH Route de Cité-Ouest 2 1196 Gland, Switzerland Ø +41 22 354 34 56 www.carestreamhealth.com	Carestream 9	2	2	143								82	87, 88			114	
CHILI GmbH Burgstrasse 61 69121 Heidelberg, Germany Ø +49 6221 18079-10 www.chili-radiology.com	CHILI* Digital Radology		2	143													
CHISON Medical Imaging Co., Ltd No.8, Xiang Nan Road, Shuo Fang New District 214142 Wuxi, China Ø 86-0510-8531 0937 export@chison.com.cn www.chison.com.cn	CHISON Value Beyond Imaging																120
CIVCO Medical Solutions 102 First Street South Kalona, Iowa 52247, USA $\emptyset +1$ 319-656-4447 info@civco.com www.civco.com																	111, 135
CPS Color Printer Systems Vertriebs GmbH Lange Zaun 1 57319 Bad Berleburg, Germany Ø +49 2751 444629	CPS Char Ress Char Ress Vanish - Galf		111													114, 115, 118	

RAD-BOOK 2011 ____

		RIS	PACS	Workstations	Computed Tomography	Magnetic Resonance	Injectors	Interventionelle Systeme	Mammography	R/F	Bone Densitometer	CR	DR	Molecular Imaging	Display Systems	Printers	Ultrasound
Digithurst Wasserrunzel 5 91186 Büchenbach, Germany Ø +49-(0)91 71-96 71 0 marketing@digithurst.de www.digithurst.de	BIdverarbeitungssysteme	2	2	143													
DMS 393 rue Charles Lindbergh 34130 Mauguio, France Ø +33 (0)4 67 50 49 00 www.dms.com											75						
Dome Nijverheidscentrum 28 2761 JP Zevenhuizen, The Netherlands Ø +31 180 63 4356 www.ndssi.com															111, 112, 113		
Dunlee Medical Components European Customer Service Center Veenpluis 6 5684 PC Best, The Netherlands \emptyset +31 40 2762500	A Division of Philips Healthcare				18					75							
EIZO GmbH Display Technologies Siemensallee 84 76187 Karlsruhe, Germany Ø +49 721 20321-0 www.eizo.eu								47							110, 111		
Esaote S.r.l. Via A. Siffredi, 58 16153 Genova, Italy \emptyset +39 010 6547.1 esaote@esaote.com www.esaote.com	esaote					21											120, 121
FUJIFILM EUROPE GMBH Heesenstr. 31 40549 Duesseldorf, Germany Ø +49 211 5089-246 www.fujifilm.de/medical	FUJ¦FILM		2	143					55			82, 83	88, 99			115	121
GE Healthcare 283 Rue de la Minière 78533 BUC Cedex, France \emptyset +33 130-704040 www.gehealthcare.com	GE Healthcare	2	2	143	8	21, 22		39, 42	55	66, 69, 71			88, 90, 99	103, 104			122, 123
GEMED GmbH Ortsstr. 56 89081 Ulm, Germany \emptyset +49-7304-9191-60 info@gemed.de www.gemed.de	Geelledulf für medizinisches Datermanagement mbH	2	2	143													
General Medical Merate S.p.A. Via Partigiani, 25 24068 Seriate (BG), Italy \$\vee\$ 459 035 4525311 info@gmmspa.com www.gmmspa.com	GMM												90, 91				

138 SUPPLIERS	<u>S/</u>	RIS	PACS	Workstations	Computed Tomography	Magnetic Resonance	Injectors	Interventionelle Systeme	Mammography	R/F	Bone Densitometer	CR	DR	Molecular Imaging	Display Systems	Printers	Ultrasound
Hitachi Medical Systems Europe (Holding) AG Sumpfstrasse 24 6300 Zug, Switzerland Ø +41 41-748 63 33 www.hitachimedicalsystems.com	HITACHI Inspire the Next				9	24											123, 124
Hologic, Inc. 35 Crosby Drive Bedford, MA 01730, USA Ø +1.781.999.7300 www.hologic.com	HOLOGIC CLARITY OF VISION					32		42	58, 59		75						
I.A.E. S.P.A. Via Fabio Filzi 53 20032 Cormano (MI), Italy Ø 02 - 66306255 / 6150444 iaexray@iae.it www.iae.it					18			46	63	75			100				
IBA Dosimetry GmbH Bahnhofstr. 5 90592 Schwarzenbruck, Germany \emptyset +49 9128 607 14 www.iba-dosimetry.com	iba Dosimetry				18			46	63	75, 76			100	106		118	
IMAGE Information Systems Europe Ltd. Lange Straße 16, 18055 Rostock, Germany Ø +49 381 203 38 58 Ø +49 381 660 80 43, www.image-systems.biz	IMAGE Information Systems 14											83			111		
ITZ Medicom GmbH & Co KG Siemensring 44a 47877 Willich, Germany Ø 0 21 54 / 49 79 60 www.itz-medi.com	itz-medi.com	2	2	143													
iSOFT Health GmbH Am Exerzierplatz 14 68167 Mannheim, Germany Ø +49 621 3928-0 www.isofthealth.com	isoft	2	2	143													
KONICA MINOLTA Medical Frankfurtstraat 40 1175 RH Lijnden, The Netherlands \emptyset +31 20 659 260 www.konicaminolta.eu			2	143					59, 63			83, 84	91			116	
Landwind International Medical Science PTE Ltd. Tangtou Avenue, Shiyan Town Bao'an District Shenzhen 518108, China \mathcal{O} +86-755-83933788 sandie.peng@landwind.com.cn www.landwind.com.cn								42		66			91, 92, 99				124, 126
Mecall S.r.1. Via Negrelli, 55 20035 Lissone (MI), Italy \emptyset +39 039 243151 info@mecall.it www.mecall.it	MECALL												92				

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		RIS	PACS	Workstations	Computed Tomography	Magnetic Resonance	Injectors	Interventionelle Systeme	Mammography	R/F	Bone Densitometer	CR	DR	Molecular Imaging	Display Systems	Printers	Ultrasound
medavis GmbH Bannwaldallee 60 76185 Karlsruhe, Germany Ø +49 721 92910-360 www.medavis.com	medavis 🕏	2	2														
MMS Medicor Medical Supplies GmbH Heinrich-Hertz-Strasse 6 50170 Kerpen, Germany Ø +49 2273 9808-0 www.mms-medicor.de	Medicor				9	25											
medifa-hesse GmbH & Co. KG Industriestraße 5 57413 Finnentrop, Germany Ø +49 2721 7177-0 www.medifa.com	medifa' made in Germany				17	31		46									
medigration GmbH Schuhstr. 30 91052 Erlangen, Germany \emptyset +49 9131 69087-40 www.medigration.de	The Digital Company		2	143					59				92, 93			116, 118	
medison Europe Valkweg 1 1118 EC Schiphol, The Netherlands Ø +31 206 554 735 www.medison.com	see it all																126, 127
MEDRAD Medizinische Systeme GmbH Industriestraße 3, 97332 Volkach, Germany Ø +49-9381-803680 www.medrad.com							34, 35										
MEDTRON AG Hauptstraße 255 66128 Saarbrücken, Germany Ø +49 681 97017-0 www.medtron.com							35, 36										
Medtronic International Trading Sàrl Route du Molliau 31 1131 Tolochenaz, Switzerland Ø +41-21-802-0 www.medtronicnavigation.com	Medtronic					24		44									
SHENZHEN MINDRAY BIO-MEDICAL ELECTRONICS CO., LTD. Mindray Building Keji 12th Road South, High-tech Industrial Park Nanshan, Shenzhen 518057, China. Tel: +86 (755) 26582888, 26582492 intl-market@mindray.com · mindray.com	mindray					25							93				127, 128
Mitsubishi Electric Europe B.V. Gothaer Str. 8, 40880 Ratingen, Germany \emptyset +49-(0)2102-4861666 www.mitsubishi-vis.de	MITSUBISHI ELECTRIC Changes for the Better															116, 117	

140 <u>Companie</u> Suppliers	<u>S/</u>	RIS	PACS	Workstations	Computed Tomography	Magnetic Resonance	Injectors	Interventionelle Systeme	Mammography	R/F	Bone Densitometer	CR	DR	Molecular Imaging	Display Systems	Printers	Ultrasound
NDS Surgical Imaging Nijverheidscentrum 28 2761 JP Zevenhuizen, The Netherlands Ø +31 180 63 4356 www.ndssi.com	SURGICAL - IMAGING																
MMS Medicor Medical Supplies GmbH Heinrich-Hertz-Strasse 6 50170 Kerpen, Germany Ø +49 2273 9808-0 www.mms-medicor.de	Nemoto						36										
OR Technology Waldemarstraße 20 g/h 18057 Rostock, Germany Ø +49 381 20 36 126 www.or-technology.com	0 R Technology	2	2	143									93, 94				
Philips Healthcare Boschdijk 525 5621 JG Eindhoven, The Netherlands ∅ +31 402785109, e.de.wilde@philips.com, www.philips.com/healthcare	PHILIPS	2	2	143	9	26, 27		39, 40, 44	59	66, 69, 71, 72		84	94, 95	104, 105			128, 129, 130
Planmed Oy Asentajankatu 6 00880 Helsinki, Finland Ø +358 20 7795 300 www.planmed.com	Planmed				17				60								
PROTEC GmbH & Co. KG Lichtenberger Str. 35 71720 Oberstenfeld, Germany Ø +49 7062 92550 www.protec-med.com	PROTEC [®] medical systems		2	143								85	95, 96				
Provotec GmbH & Co.KG Brandenburger Ring 2-4 32339 Espelkamp, Germany Ø +49 05772 9789 00 www.provotec.com	PROVOTEC.									67							
PTW-Freiburg Physikalisch-Technische Werkstätten Dr. Pychlau GmbH Lörracher Str. 7 79115 Freiburg, Germany Ø +49 761 49055 0 www.ptw.de	PTW				18			48	64	76			101	106			
Radcal Corporation 426 West Duarte Road Monrovia, CA 91016, USA \emptyset + 1(626) 357-7921 sales@radcal.com service@radcal.com	Radcal							48, 49		76			101				
RTI Electronics AB Göteborgsvägen 97/50 43137 Mölndal, Sweden Ø +46 31746 3600 www.rtielectronics.com	M RTI				18			49		77			101	106			

		RIS	PACS	Workstations	Computed Tomography	Magnetic Resonance	Injectors	Interventionelle Systeme	Mammography	R/F	Bone Densitometer	CR	DR	Molecular Imaging	Display Systems	Printers	Ultrasound
SCHILLER AG Altgasse 68, P.O. Box 1052 6341 Baar, Switzerland Ø +41 41 766 42 42 www.schiller.ch	SCHILLER The Art of Diagnostics					32											
SCS Software Computer Solutions GmbH Wermbachstrasse 50-52 63739 Aschaffenburg, Germany Ø 06021 - 429430 mhoppe@myscs.com www.myscs.com	scs				17												
Sectra Imtec AB Teknikringen 20 583 30 Linkoeping, Sweden Ø +46 13235200 www.sectra.se/medical	SECTRA		2	143					60, 62								
Shimadzu Europa GmbH Medical Systems Division, Albert-Hahn-Str. 6-10, 47269 Duisburg, Germany & +49 203 7687-0 www.shimadzu.eu	🔁 SHIMADZU							40, 45		68, 70, 72, 73			96, 99, 100				
Siemens AG, Healthcare sector Henkestr. 127 91052 Erlangen, Germany © 449 9131 84-0 www.siemens.com/healthcare	SIEMENS	2	2	143	10, 12	28, 29		40, 41, 45	62, 63, 64	68, 70, 73			97, 98, 100	105, 106			130, 131, 135
Sonoscape CO.,Ltd. 9/F.Yizhe Building, Yuquan Rd., Shenzen, 518051, China Ø +86-755-26722890 sonoscape@sonoscape.net www.sonoscape.com	SonoScape																132
SuperSonic Imagine Les Jardins de la Duranne, Bât E & F 510, rue René Descartes 13857 Aix-en-Provence, France \emptyset +33 (0)4 88 19 68 55 contactsFR@supersonicimagine.fr www.supersonicimagine.fr	SUPERSONIC IMAGINE The Theregoestic Company																
Telepaxx Software GmbH Wasserrunzel 5 91186 Büchenbach, Germany Ø +49 9171 89 81 80 info@telepaxx.com www.telepaxx.com	TELEPAXX Medical Archiving																
Technix S.p.A. Via E. Fermi, 45 24050 Grassobbio (BG), Italy Ø +39 (0)35 3846611 technixd@technix.it www.technix.it	TECHNIX							46		71							
Tetenal AG & CO. KG Schützenwall 31-35 22844 Norderstedt, Germany Ø +49-40-521 45-0 saleseurope@tetenal.com www.tetenal.de	TETENAL Medical Imaging Division												98			117	
142 SUPPLIERS	<u>S/</u> }	RIS	PACS	Workstations	Computed Tomography	Magnetic Resonance	Injectors	Interventionelle Systeme	Mammography	R/F	Bone Densitometer	CR	DR	Molecular Imaging	Display Systems	Printers	Ultrasound
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TOMOVATION GmbH Erinstr. 28 44575 Castrop-Rauxel, Germany Ø +49 2305 97322-0 www.tomovation.com	TOMOVATION				19	32	34							106			
Toshiba Medical Systems Europe Zilverstraat 1 2718 RP Zoetermeer, The Netherlands \mathscr{O} +31 79 3689222 www.toshiba-medical.eu	TOSHIBA				13, 14	29, 30		41, 42		68							132, 133
Totoku Hammfelddamm 6 41460 Neuss, Germany +49-2131-36668-0 info@totoku.de www.totoku.de	TOTOKU														113		
ulrich GmbH & Co. KG Buchbrunnenweg 12 89081 Ulm, Germany \hat{v} +49 731 9654-0 www.ulrichmedical.com	Ulrich medical				19		37			77							
Ultrasonix Medical Corporation 130 – 4311 Viking Way Richmond, BC, Canada,V6V 2K9 Ø +01 604 279 8550 www.ultrasonix.com	ULTRASONIX																133, 134
Valmex Photografische Produkte GmbH Partnachweg 1 86165 Augsburg, Germany Ø +49 821 71 96 03 www.valmex.de	STORE												98				
Visage Imaging GmbH Lepsiusstr. 70 12163 Berlin, Germany ∅ +49 30 700968-0 www.visageimaging.com	VISAGE IMAGING*	2	2	143													
VISUS Technology Transfer GmbH Universitätsstraße 136 44799 Bochum, Germany Ø +49 234 93693-0 sales@visus.com www.visus.com	visus	2	2	143													
Vital Images Europe B.V. Muzenstraat 89 2511 WB Den Haag, The Netherlands ∅ +31 704 262 181 www.vitalimages.com	VITAL for engr of condentacellage		2	143	19												
Ningbo Xingaoyi Medical Instruments Co. Ltd (XGY Medical) 777 West Tanjialing Rd., 315400 Yuyao, China & +86 574 62730899 www.china-mri.com	Kgy					30, 31											
ZONARE Medical Systems, Inc 420 N. Bernardo Ave Mountain View, CA 94043-5209, USA Ø +1-(650) 230-2800 www.zonare.com																	134

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Workstation

	Multimodality	Mammography	Orthopedics	Cardiology	CAD	
AGFA 🐢 HealthCare	IMPAX	IMPAX	IMPAX	IMPAX		
CHILI* Digital Radology	CHILI Report	CHILI Report	CHILI Report	CHILI Report	3rd Party SW	
DIGITHURST Bilavasterin agangterne	TeamView	TeamView e-pacs				
FUJIFILM	SYNAPSE SYNAPSE Cardiovascular SYNAPSE 3D	SYNAPSE	SYNAPSE Synapse 3D	SYNAPSE Cardiovascular SYNAPSE 3D	SYNAPSE	
GE Healthcare	Centricity PACS with embedded AW Server	Centricity Mammography	Centricity PACS with integrated Traumacad by Voyant Health	Centricity Carddas/ CA1000	AW Server	
Geetlschaft für medizinisches Datemanagement mbH	GEMED-PACS Workstation	GEMED-PACS Mammo-Workstation	GEMED-PACS Ortho-Workstation	GEMED-PACS Cardio-Workstation		
IMAGE Information Systems 154	iQ-VIEW PRO	iQ-VIEW PRO	iQ-VIEW PRO OrthoView			
isoft						
itz-medi.com	Hyper.PACS Hyper.LINK	Hyper.PACS	Hectec RSA-Biomedical Localite	Hyper.PACS	3rd Party SW Ziosoft Terarecon Median	
S KONICA MINOLTA	Acies ImagePilot	Acies	Acies		Acies	
medavis 🏂						
The Digital Company	ImageVision	MammoView	ImageVision Basic			
dicomPACS®	dicomPACS	dicomPACS	dicomPACS	dicomPACS		
PHILIPS	iSite Radiology	Intellispace Breast	OrthoView on iSite Radiology	Xcelera	CAD on iSite PACs	
PROTEC [®] medical systems	PROPAXX and/or CONAXX	PROPAXX and/or CONAXX	PROPAXX and/or CONAXX			
SECTRA	IDS7/mx, IDS7/dx IDS7/qa, IDS7/cx IDS7/mqa	IDS7/mx IDS7/mqa	Sectra Orthopaedic Package Preop on-line	IDS7/dx	IDS7/mx	
SIEMENS	syngo.via	syngo MammoReport syngo.plaza	EndoMap	syngo Dynamics syngo.via	syngo CAD Applications syngo.via	
TELEPAXX Medical Archiving						
VISAGE IMAGING*	Visage 7	Visage 7		Visage 7		
VISUS	JiveX Diagnostic	JiveX Diagnostic Mammo	JiveX Diagnostic	JiveX Diagnostic	3rd party	
VITAL VITAL	Vitrea Enterprise Suite (VES) fully virtualized			Vitrea Enterprise Suite, Cardiac Option	Vitrea Enterprise Suitte, Lung CAD Option Vitrea Enterprise Suite, Colon CAD Option	

T SOLUTIONS RAD-BOOK 2011

Advanced Visualization	iv.	
IMPAX	Agfa HealthCare Septestraat 27 · B − 2640 Mortsel Ø +32 3 444 94 44 www.agfa.com	
3rd Party SW	CHILI GmbH Burgstrasse 61 · D – 69121 Heidelberg Ø +49 6221 18079-10 info@chili-radiology.com · www.chili-radiology.com	
	Digithurst Wasserrunzel 5 · D − 91186 Büchenbach Ø +49-(0)91 71-96 71 0 marketing@digithurst.de · www.digithurst.de	
SYNAPSE SYNAPSE 3D	FUJIFILM EUROPE GMBH Heesenstr. 31 · D – 40549 Duesseldorf Ø +49 211 5089-246 www.fujifilm.de/medical	
AW Server	GE Healthcare Lerchenbergstr. 15 · D – 89160 Dornstadt Ø +49 7348 9861-0 www.gchealthcare.com	
GEMD-PACS 3D	GEMED GmbH Ortsstr. 56 · D - 89081 Ulm Ø +49-7304-9191-60 info@gemed.de · www.gemed.de	
iQ-VIEW PRO 3D	IMAGE Information Systems Europe Ltd. Lange Straße 16 · D - 18055 Rostock Ø +49 381 496 58 20 Fax +49 381 203 38 59 · www.image-systems.biz	
	iSOFT Health GmbH Am Exerzierplatz 14 · D – 68167 Mannheim Ø +49 621 3928-0 www.isofthealth.com	
Hyper.PACS and 3rd Party SW	ITZ Medicom GmbH & Co KG Siemensring 44a · D – 47877 Willich Ø 0 21 54 / 49 79 60 www.itz-medi.com	
Acies	Konica Minolta Medical & Graphic Imaging Europe B.V. Frankfurtstraat 40 · NL – 1175 RH Lijnden Ø +31 20 659 02 60 www.konicaminolta.eu	
	medavis GmbH Bannwaldallee 60 · D − 76185 Karlsruhe Ø +49 721 92910-360 marketing@medavis.com · www.medavis.com	
ImageVision	medigration GmbH Schuhstr. $30 \cdot D - 91052$ Erlangen $\emptyset + 49 9131 69087-40$ info@medigration.de · www.medigration.de	
	OR Technology Waldemarstraße 20 g/h · D – 18057 Rostock Ø +49 381 20 36 126 info@or-technology.com · www.or-technology.com	
Volume Vision on iSite PACS	Philips Healthcare Boschdijk 525, NL - 5621 JG Groenewoud, Eindhoven \emptyset +31 402785109, e.de.wilde@philips.com · www.philips.com/healthcare	
PROPAXX and/or CONAXX	PROTEC GmbH & Co. KG In den Dorfwiesen 14 · D – 71720 Oberstenfeld Ø +49 7062 92550 protec@protec-med.com · www.protec-med.com	
IDS7/dx IDS7/cx	Sectra Imtec AB Teknikringen 20 · SE – 583 30 Linkoeping Ø +46 13235200 info.imtec@sectra.se · www.sectra.se/medical	
syngo.via	Siemens AG, Healthcare Sector Henkestr. 127 · D − 91052 Erlangen Ø +49 9131 84-0 www.siemens.com/healthcare	
	Telepaxx Software GmbH Wasserrunzel 5 · D – 91186 Büchenbach Ø +49 9171 89 81 80 info@telepaxx.com · www.telepaxx.com	
Visage 7	Visage Imaging GmbH Lepsiusstr. 70 · D – 12163 Berlin Ø +49 30 700968-0 www.visageimaging.com	
JiveX Diagnostic 3D	VISUS Technology Transfer GmbH Universitätsstraße 136 · D – 44799 Bochum Ø +49 234 93693-0 sales@visus.com · www.visus.com	
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