

Take the Lead in CT SOMATOM Sensation 64



"Imaging of this

# quality, sharpness, and speed

gives us the Opportunity to study the human anatomy at a level that has only been dreamt about."

Werner A. Bautz, MD, Chairman, Department of Diagnostic Radiology at the University Erlangen-Nuremberg, Germany

Siemens Medical Solutions has been the leader in CT innovation for over 30 years. Once again, we demonstrate our leadership in technology and advanced applications with the introduction of our new flagship products, the SOMATOM® Sensation 40 and the SOMATOM Sensation 64. Our customerfocused philosophy has always been to continually integrate cutting-edge, imaging applications into daily clinical practice. With the high-end SOMATOM Sensation scanners, we continue this tradition and firmly establish a new industry benchmark for diagnostic excellence. A significant improvement in visualization of the finest details is what physicians expect from the latest CT technology: The SOMATOM Sensation perfectly meets this requirement by pushing the boundaries of temporal and spatial resolution to a new level, with previously unachievable image quality. At Siemens, yesterday's vision is today's reality both SOMATOM Sensation 40 and SOMATOM Sensation 64 provide breathtaking image sharpness and clarity, combined with the simplicity and speed of seamless integrated workflow.

The SOMATOM Sensation 40 provides access to Siemens' revolutionary z-Sharp™ Technology, while the SOMATOM Sensation 64 takes you to the peak of clinical perfomance. Empowered by the Siemens unique STRATON® tube and z-Sharp Technology, the SOMATOM Sensation 40 and the SOMATOM Sensation 64 allow you to routinely achieve unprecedented diagnostic detail with the industry's highest isotropic resolution of below 0.4 millimeter and fastest rotation time of up to 0.33 seconds. By utilizing the most powerful advanced applications, every user can routinely image the smallest pathology and finest anatomical structures in just a few seconds. Additionally, the optimized workflow enhances clinical performance while maintaining patient focus and comfort.

Invest in the future. Experience first-hand what it means to have the industry's most innovative CT scanner and achieve a quantum leap in CT diagnosis with the SOMATOM Sensation. Take the Lead in CT!



## Technology and Data SOMATOM Sensation 64 Product Matrix

Basic configuration	STRATON X-ray tube with	
basic comigaration	0.37 s gantry rotation	
	speed, Navigator,	
	, ,	
	70 kW generator (prepared	
	for 80 kW generator	
	upgradable in 2005)	
syngo® Examination	•	
syngo Viewing	•	
syngo Filming	•	
syngo Archiving & Netv		
syngo Dynamic Evalua	tion •	
Image Filter	•	
syngo Service Solutions	•	
SOMATOM LifeNet	•	
Speed4D Workflow Pa	ckage o	
(WorkStream4D™,		
syngo InSpace4D™, Wi	zard,	
VolPro and syngo VRT™	1)	
Workplaces		
Wizard	0	
Additional Wizard	0	
syngo 3D Workstation	0	
LEONARDO		
Volume Pro Graphics	0	
Additional configurati	ons	
0.33 s gantry rotation s	speed o	
Extended Field of View	0	
syngo Security Package	9 0	
Clinical 3D Application		
Real-time MPR	•	
syngo 3D SSD	•	
Volume Measurements	•	
syngo VRT	0	
syngo InSpace4D o		
-730002		

Routine Applications	
CT-Angiography	•
syngo Dental CT	0
syngo Osteo CT	0
syngo Pulmo CT	0
syngo Perfusion CT	0
syngo Fusion	0
CARE Applications	
CARE Bolus CT	•
CARE Dose4D™	•
CARE Vision CT with HandCARE™	0
Advanced Applications	
syngo Fly Through	0
syngo LungCARE	0
syngo LungCARE NEV	0
syngo Colonography	0
WorkStream4D	
Recon card Wizard	0
3D-Recon	0
Cardiovascular Applications	
HeartView CT	0
HeartView CS (HeartView CT,	0
syngo Calcium Scoring)	
HeartView CI (HeartView CT,	0
syngo Calcium Scoring,	
syngo Vessel View, syngo Argus)	
syngo Calcium Scoring	0
syngo Vessel View	0
syngo Argus	0

# Technology and Data

Gantry	
Aperture	70 cm
Scan field	50 cm, 70 cm Extended FOV*
Tilt	± 30°
Rotation time	0.33*, 0.37, 0.5, 1.0 s
Temporal resolution	down to 83 ms (HeartView CT*)
Continuously rotating tube-det	ector unit with optimized geometry for high-resolution data acquisition
across the entire scan field	
Data acquisition system	
Max. number of slices/rotation	64
Number of detector channels (DAS)	64
Number of detector rows	40
Elements	26,880
Total channels per slice	1,344
Number of projections	up to 4,640 (1/360°)
Spiral acquisition modes	64 x 0.6, 20 x 0.6, 20 x 1.2, 12 x 0.6 mm (UHR), prepared for 24 x 1.2 upgradable in 2005
Sequence acquisition modes	30 x 0.6, 20 x 1.2, 1 x 10, 1 x 5, 6 x 0.6 mm (UHR)
z-Sharp Technology	The unique STRATON X-ray tube utilizes an electron beam that is accurately and rapidly deflected, creating two precise focal spots alternating 4,640 times per second. This doubles the X-ray projections reaching each detector element. The two overlapping projections result in an oversampling in z-direction, known as Double z-Sampling. The resulting measurements interleave half a detector slice width, doubling the scan information without a corresponding increase in dose. Siemens' proprietary, Ultra Fast Ceramic (UFC $^{\text{TM}}$ ) Detector and the corresponding 64-slice detector electronics, enables a virtually simultaneous readout of two projections for each detector element – 2 x 32 slices for every viewing angle – resulting in a full 64-slice acquisition. z-Sharp Technology, utilizing the STRATON X-ray tube, Double z-Sampling and the UFC Detector, provides visualization of below 0.4 mm isotropic voxels scan speed independent with a corresponding elimination of spiral artifacts in the daily clinical routine at any position within the scan field.
Speed and efficiency based on	Ultra Fast Ceramic (UFC) Detector with ultra short afterglow
Designed to effectively suppres	•

# Technology and Data

Generator			
Max. power	70 kW (prepared for 80 kV		
	upgradable in 2005)		
Tube assembly			
Tube	STRATON		
Tube current range	28-580 mA		
Tube voltage	80, 100, 120, 140 kV		
Anode heat storage	0 MHU (0.6 MHU		
	capacity combined with		
	5.0 MHU/min cooling rate		
	is comparable to the		
	performance of a		
	conventional tube with		
	approximately 30 MHU		
	anode heat storage		
	capacity)		
Focal spot size	0.6 x 0.7 mm/7°		
	0.8 x 1.1 mm/7°		
	0.7 x 0.7 mm/7°		
Cooling rate	5 MHU/min		
Computer controlled m	onitoring of anode		
temperature			
CARE Filter			
Al equivalent	tube: 6.8 mm Al		
Beam limiting device	collimator: 0.5 mm Al,		
	0.6 mm Ti		
	(equivalent to 5.5 AI)		

SureView™ Multislice	Spiral Image Reconstruction
Reconstructed slice	0.6, 0.75, 1.0, 1.5, 2, 3,
widths	4, 5, 6, 7, 8, 10 mm
Slice increment	0.1–10 mm
Pitch factor	0.45-2.0
Spiral scan time	max. 100 s
Scan length	max. 157 cm
No. of ranges per	15
protocol	
Automatic clustering c	of scans
Optimized special hea	d reconstruction algorithm
(PFO: Posterio Fossa O	ptimization)

# Technology and Data

SureView: Siemens patented solution
for Multislice CT reconstruction
Excellent for clinical workflow:
Forget about compromises in your clinical workflov
Just specify the slice thickness in your protocols
according to your clinical needs. SureView
automatically takes care of providing excellent
volume image quality – with superior performance
Multiply your clinical performance with SureView
High-quality imaging at any scanning speed.
SureView allows the CT scanner to automatically
select the necessary pitch value to achieve the
coverage and scan time defined by you, while
keeping selected slice thickness and image quality
Up to 20% dose savings in spiral mode:
When employed in spiral scanning, SureView yield
a remarkably lower image noise level. Thus, to
produce the same noise level of sequential CT image.
the spiral scan protocols are created with lower mA
and consequently up to 20% lower dose.
Includes advanced cone beam reconstruction
algorithms for elimination of cone beam artifacts
with 64-slice acquisition

Topogram Length	128–1,536 mm
Scan times	1.5–15.6 s
Views	a.p., p.a., lateral
CARE Topo	
Real-time topogram	
Manual interruption pos	sible once desired anatomy
has been imaged	
Sequence scan	
Reconstructed	0.6, 1, 1.2, 1.8, 2, 2.4,
slice widths	3, 3.6, 4.8, 5, 6, 7.2*, 9,
	10, 12 mm
Scan times (full scan)	0.33*, 0.37, 0.5, 1 s
Partial scan times (240°,	) 0.22*, 0.25, 0.33, 0.67 s
No. of uninterrupted	100
scans per range	
No. of ranges	15
per protocol	
Scan cycle time	0.75-60 s (± 10%)
(min. scan cycle time	
depending 0.5-1.5 s)	
Acquisition with or with	out table feed
Automatic clustering of	scans

## Image Quality

#### Isotropic resolution in clinical acquisition modes

Industry's highest isotropic resolution in all three planes (x, y and z)

- better than 0.4 mm
- in daily clinical routine
- at all scan speeds
- at all positions of the scan field

#### Phantom validation of z-Sharp Technology

CATPHAN measurement demonstrates technical high-contrast resolution. Up to 0.33 mm is clearly visible with any pitch.

Pitch	0.55	1.0	1.5
z-axis			
0.33 mm			
0.36 mm			目
0.38 mm	=	111	===
0.42 mm			

CATPHAN measurement demonstrates technical high-contrast resolution. Up to 0.33 mm voxel size is clearly visible at any position within the scan field.

Pitch	1.0	1.0
	Center	100 mm off-center
z-axis		
0.33 mm		May .
0.36 mm		<b>F</b>
0.38 mm	-	-
0.42 mm	IIII	

# Image Quality

Low-contrast resolution

Low-contrast resolution	n is the ability to see		
<ul> <li>a small object (mm)</li> </ul>			
• with a certain contro	ast difference (HU)		
• on a particular phan	itom (Ø)		
• at a certain mAs val	ue (mAs)		
• with a particular pat	tient dose (mGy)		
Spiral			
Phantom	CATPHAN (20 cm)		
Object size	5 mm		
Contrast difference	3 HU		
Dose at the surface	19 mGy at 180 mAs		
Technique	10 mm, 120 kV		
Sequence			
Phantom	CATPHAN (20 cm)		
Object size	5 mm		
Contrast difference	3 HU		
Dose at the surface	17 mGy at 180 mAs		
Technique	10 mm, 120 kV		

High-cont	rast r	esolutio	n		
0% MTF (±	10%	)	30 lp/cm,	0.17 mm	1
2% MTF (±	10%	)	24 lp/cm,	0.21 mm	1
Technique			160 mA,	120 kV, 1	.0 s,
	0.6 mm				
Homogen	eity				
Cross-field	unifo	rmity	max. ± 4	HU	
in a 20 cm			typ. ± 2 F	·ΙU	
water pha	ntom				
Dose, CTD	I <sub>100</sub> v	alues			
Phantom		kV	kV	kV	kV
Ø		80	100	120	140
16 cm	Α	4.2	8.9	13.2	20.2
	В	4.5	9.2	13.5	21.0
32 cm	Α	1.2	2.7	4.3	7.0
	В	2.3	5.0	7.8	12.0
A: at cente	r B: 1	cm belo	w surface		
Technique	Coll	imation	20 x 1.2 n	nm	
	100	mAs			
	360	° rotatio	n		
	PMI	MA-Phar	ntom		
	Abs	orbed do	se for refe	rence mat	erial air
	Max	k. deviat	ion ± 30%		
	Турі	ically les	s than 15	%	
	Valu	ies acco	rding to IE	C 60601	2-44

# WorkStream Patient Handling

Patient registration
Online registration
Pre-registration of patients
Emergency patient registration (allows examination
without entering patient data before scanning)
Patient information from HIS/RIS
via DICOM Get Worklist
MPPS (Modality Performed Procedure Step)
Protocols
Up to 10,000 protocols can be edited, modified
and stored
Patient communication
Integrated patient intercom
Automatic Patient Instruction (API)
Freely recordable
• 30 API text pairs
Presets in seven languages available
Integrated display panel
Gantry front display showing current scan
Gantry from display showing current scan

parameters such as kV, mA, scan time, table position,

(e.g. in case of trauma or interventional exams)
Gantry tilt control from the operator's console

gantry tilt and ECG trace\*

Gantry front and rear control panels
For convenient patient positioning

Lateral and sagittal lig	Jht markers	
Horizontal and vertical	laser light, which controls	
the isocentric position of the patient		
Foot pedals		
4 pairs of foot pedals a	re available on the bottom	
edges of the patient ta	ble which allow to lift the	
table		
Patient table		
Max. table load	200 kg/450 lbs	
Table speed	1–150 mm/s	
Vertical table	53–102 cm (at table top)	
travel range		
Vertical travel speed	2.5–45 mm/s	
Scannable range	157 cm	
(metal-free)		
Distance between	37 cm	
gantry front and		
table base		

# WorkStream Processing

Image reconstruction	1	
Real-time display	online reconstruction	
	during scanning	
Slice thickness	0.6–10 mm	
Scan field	50 cm, 70 cm	
	Extended FOV*	
Recon field	5–50 cm, 70 cm	
	Extended FOV*	
Recon time	up to 20 images/s	
	with full cone beam	
	reconstruction	
	with z-Sharp Technology	
	with full image quality	
Recon matrix	512 x 512	
HU scale	-1,024 to +3,071	
Extended HU scale	-10,240 to +30,710	
Freely selectable slice	thickness for prospective	
and/or retrospective re	econstruction	
Real-time image displo	ay in 512 x 512 matrix parallel	
to spiral acquisition (e	e.g. for trauma)	

Image display: Flat scre	en	
Monitor size	46 cm (18.1")	
Monitor resolution	1,280 x 1,024	
Image display matrix	1,024 x 1,024	
Pixel size	min. 0.28 mm	
CINE display		
Display of image sequen	ces	
Automatic or interactive	with mouse control	
Max. image rate > 10/s		
Windowing		
Window width and cente	er freely selectable	
Single window		
Double window (e.g. bol	ne/soft tissue)	
Multiple window setting	s for multi-image display	
Organ-specific window s	ettings, e.g. for soft tissue	
and bones		
Filming		
Digital film documentati	on, connection	
to a suitable digital camera		
Connection via DICOM B	asic print	
Automatic filming		
Interactive virtual film sheet		
Customizable film formats with up to 64 images		
Filming parallel to other activities		
Independent scanning and documentation		
Freely selectable position	ning of images onto	
film sheet		
Configurable image text		
Printing		
Documentation on posts	cript printer supported	

\* Optional

# WorkStream Processing

Image transfer/Netw	orking or a second seco
Interface for transmit	ting medical images and
information in the DI	COM industrial standard.
Permits communicati	on between devices from
different manufacture	ers.
DICOM Storage (Send	l/Receive)
DICOM Query/Retrieve	e
DICOM Basic print	
DICOM Get Worklist (I	HIS/RIS)
DICOM MPPS (Modali	ty Performed Procedure Step)
DICOM Storage Comn	nitment
Image storage	
Main storage	146 GB; 260,000 images
Raw data	
Capacity	300 GB
Additional storage	
CD-R	700 MB
	1,100 images
MOD DICOM*	5.2 GB drive
	2.3/4.1 GB cartridge
	4,000/7,500 images

#### Parallel evaluation of more than 10 Regions of Interest (ROI) • Circle • Irregular Polygonal Statistical evaluation • Area/Volume • Standard deviation Mean value • Min./max. values • Histogram Profile cuts Horizontal Vertical • Oblique Distance measurement Angle measurement Online measurement of a 5 x 5 pixel size ROI Freely selectable positioning of coordinate system

**Evaluation tools** 

Crosshair

Image annotation and labeling

# WorkStream Processing

#### **Dynamic Evaluation**

Evaluation of contrast enhancement in organs and tissues

Calculation of

- Time-density curves (up to 5 ROI's)
- Peak-enhancement images
- Time-to-peak images

#### 2D post-processing

Image zoom and pan

Image manipulations

- Averaging, subtraction
- Reversal of gray-scale values
- Mirroring

Image enhancement algorithms

- LCE: Low Contrast Enhancement for improving low contrast detectability
- HCE: High Contrast Enhancement for increased sharpness of high contrast structures
- ASA: Advanced Smoothing Algorithm edge preserving smoothing filter, dedicated to Cardiac exams

#### WorkStream4D\*

4D workflow with direct generation of axial, sagittal, coronal, or double-oblique images from standard scanning protocols

Elimination of manual reconstruction steps
Reduction of data volume by up to a factor of 10,
since virtually all diagnostic information is captured
in 3D slices

### Additional Configurations

## Clinical 3D Applications

#### **Extended Field of View\***

Software program with special image reconstruction algorithms that allow for visualization of objects using a FOV up to 70 cm. The image quality for the area outside the standard 50 cm scan field does not meet the image quality specifications shown in the technical data sheet and image artifacts may appear common, depending on the anatomy scanned.

#### syngo Security Package\*

Provides functionality for user management and flexible access control for patient data

#### Real-time MPR

Real-time multiplanar reformatting of secondary views

Variable slice thickness (MPR thick, MPR thin) and distance with configurable default values

Viewing perspectives

- Sagittal
- Coronal
- Oblique
- Double oblique
- Freehand (curvilinear)

#### syngo 3D SSD

SSD: Surface Shaded Display

Three-dimensional display of surfaces with different density values

- Soft tissue
- Bone
- Contrast-enhanced vessels

#### Volume measurements

Measurements of various tissues and organs with HU-based region growth algorithms and interactive ROI definition

#### syngo VRT\* (Volume Rendering Technique)

Advanced 3D application package for the optimal display and differentiation of different organs through independent control of color, opacity and shading in up to 4 tissue classes

# syngo InSpace4D\* – real-time interactive cardiac evaluation, in space and time

4D evaluation of the beating heart with full resolution Real-time navigation through moving anatomy in user selectable arbitrary planes

High performance volume reading for physician's diagnosis and pre-surgical planning in daily clinical routine

### **Routine Applications**

### **Advanced Applications**

#### CT-Angiography

MIP: Maximum Intensity Projection
MinIP: Minimum Intensity Projection
Thin MIP function for projection within a small slab
to focus on particular vascular structure
Evaluation of spiral images and display of vessels,
vascular anomalies, aneurysms, plaques, and
stenoses

#### syngo Dental CT\*

Reformatting of panoramic slices and paraxial sections through the lower and upper jaw for analysis in connection with implantation surgery

#### syngo Osteo CT\*

Measures the mineral density of the lumbar spine to help early diagnosis of osteopenia and osteoporosis, and to assess the effectiveness of treatment

#### syngo Pulmo CT\*

Quantitatively evaluates lung density and structure to help early diagnosis and treatment of lung disease and surgical intervention planning

#### syngo Perfusion CT\*

Evaluates dynamic CT data of the brain. It mainly aids in the early differential diagnosis of acute ischemic stroke – even in emergencies. Additionally it allows imaging of blood brain barrier disruptions in brain tumors.

#### syngo Fusion\*

Registration and composite display of CT, MR, NM and PET images

#### syngo Fly Through\*

Virtual Endoscopy software for perspective visualization of vessels, airways and intestinal organs

#### syngo LungCARE\*

Software for fast 3D-based visualization of pulmonary nodules, with the lowest possible radiation exposure

## syngo LungCARE with NEV (Nodule Enhanced Viewing)\*

Provides computer supported identification of nodules, making diagnosis much easier for physicians and offering a second reader opinion

#### syngo Colonography\*

Locates and evaluates colon polyps using non-invasive, real-time virtual 3D endoluminal viewing

## Cardiovascular Applications

### **CARE Solutions**

#### HeartView CT\*

ECG-synchronized true isotropic volume acquisition using prospective ECG triggered or retrospective ECG-gating mode

Basis for 3D cardiac reconstructions, e.g. CT-Angiography of the coronary vessels and Calcium Scoring

Quality control tools enable retrospective ECGviewing and interactions as well as computer assisted heart phase definition

The ECG trace used for gating of the CT images is supplied by an integrated ECG device and ECG display on the gantry front cover

#### syngo Calcium Scoring\*

Displays the quantity and distribution of coronary calcification for the diagnosis and treatment of cardiac disease

#### syngo Vessel View\*

Supports automatic quantification of stenoses and evaluation of aneurysms – for potentially faster diagnosis of vascular disease

#### syngo Argus\*

Dedicated software for virtual 4D-Viewing and semi-automated quantification of ventricular function

#### SureView - Multislice Spiral Image Reconstruction

Dedicated patented reconstruction algorithm for perfect volume imaging

Brilliant image quality and dose savings up to 20% in spiral mode

Includes advanced cone beam reconstruction algorithms for elimination of cone beam artifacts with 64-slice acquisition

#### **UFC – Ultra Fast Ceramic Detector**

Low patient dose. Up to 30% dose reduction compared to conventional CT detectors. High efficiency for low mAs requirements enable best possible image quality with low patient dose. More speed. Ultra short afterglow. Specially supporting Double z-Sampling of z-Sharp Technology. Optimal for sub-second and multislice acquisition.

# CARE Dose4D – minimizing dose, maximizing quality – patient by patient

Achieve the best diagnostic image quality at lowest possible dose, independent of patient size and anatomy

Fully automated dose management for adults and children with up to 66% dose reduction

#### **Pediatric protocols**

Special clinical protocols with 120 or 80 kV selection and a wide range of mAs settings. The X-ray exposure is adapted to the child's (and small adult's) weight and age, substantially reducing the effective patient dose.

### **CARE Solutions**

#### **CARE Bolus CT**

Scan mode for contrast bolus triggered data acquisition

Significant improvement of the planning procedure and diagnosis by enabling an optimum spiral scan start after contrast injection

The procedure is based on repetitive low dose monitoring scans at one slice level and analysis of the time density curve in a Region of Interest (ROI)

#### **ECG** Pulsing

Dose modulated cardiac spiral for dose reduction during the systolic heart phase (Part of the HeartView CT\* package with retrospective ECG gating). Up to 50% dose savings for the patient.

#### **CARE Filter**

Specially designed X-ray exposure filter installed at the tube collimator. Up to 25% dose reduction with increased image quality.

#### **CARE Vision CT with HandCARE\***

Perform interventions at the CT scanner with real-time image guidance, including CT fluoroscopic mode. Simultaneous display of 3 slices for optimal navigation.

#### Real-time image guidance

Image rate	up to 10 frames/s
Image matrix	512 x 512

**Foot switch.** Radiation release directly at the gantry. **Additional monitor.** For parallel image display in the examination room.

Additional monitor		
Flat screen monitor	46 cm (18.1")	
Distance from host	max. 30 m	

#### HandCARE

Real-time dose modulation during the CT-guided intervention. The tube current is automatically switched off to avoid direct X-ray exposure to the physician's hands. HandCARE yields dose savings of up to 70% for the physician and up to 30% for the patient.

\* Optional

## Installation

Dimensions				
Components	Height (mm)	Width (mm)	Length (mm)	Weight (kg)
Gantry	≤ 1,990	≤ 940	≤ 2,280	≤ 2,000
Patient table	≤ 1,022	≤ 690	≤ 2,430	≤ 500
Operator's console	≤ 720	≤ 800	≤ 1,400	≤ 65
Power cabinet	≤ 1,815	≤ 905	≤ 800	≤ 550
Cooling system	≤ 1,815	≤ 905	≤ 860 w/w	≤ 200 w/w
			≤ 900 w/a	≤ 400 w/a
Image Recon. System	≤ 1,550	≤ 610	≤ 610	≤ 120
Computer system				
Navigator	≤ 500	≤ 250	≤ 600	≤ 30
Wizard	≤ 500	≤ 250	≤ 600	≤ 30

## Installation

Power supply		
Nominal voltage 3/N~	380–480 V in 20 V steps	
Nominal line frequency	50; 60 Hz	
Line impedance	130-180 mOhm	
	(dependent on voltage)	
Nominal power	104 kVA (w/w)	
connection*	111 kVA (w/a)	
Line fuse protection	fuse 125 A selectivity 1:1.6	
Power consumption		
Computer on	2 kVA	
System on standby		
w/w	8 kVA	
w/a	10 kVA	
Scanning (operation for	12 s)	
w/w	104 kVA	
w/a	111 kVA	
Scanning (operation for	100 s)	
w/w	60 kVA	
w/a	63 kVA	
Examination room env	ironment	
Temperature range	15−28 °C	
Relative air humidity	15–75%	
without condensation		

Cooling	
Heat dissipation	max. 15 kW
to water cooling	
environment	
(only w/w cooler)	
Heat dissipation	max. 26 kW
to outside air	
(only w/a cooler)	
Electromagnetic comp	patibility
This product is in comp	liance with IEC 60601-1-2
and fulfils CISPR 11 Clas	ss A
Surface area for instal	lation
System	30 m <sup>2</sup>
Emissions class	according to IEC 601-1-2
<b>Protection against inp</b>	ut power
fluctuation/interruption	ons
X-ray	5 ms
Controllers	20 ms
Image Reconstruction	180 s
System, Navigator	optional
and Wizard	with UPS**
Fluctuation	
Nominal voltage	± 10%
Nominal frequency	± 5%

w/w = water/water; w/a = water/air\*\*
 \* Power consumption - notice: If pretransformer needed, at least 10% more power: 125 kVA
\*\* Optional

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Please find fitting accessories: www.siemens.com/medical-accessories

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