

**Qty**

**Item Description**

1

**Multitom Rax**

Multitom Rax is a Twin Robotic X-ray scanner for skeletal radiography, fluoroscopy studies, peripheral angiography studies, interventions, orthopedic procedures and Real 3D imaging of the recumbent, standing or seated patient. One integrated high-resolution flat detector for static, dynamic\* and 3D imaging\*, portable wireless detectors\* for a fully digital imaging chain with a digital imaging system, an image and control station with application and evaluation programs and DICOM network connection.

\* Portable wireless detectors, fluoro and 3D imaging are options.  
The system is 3D ready for later upgrade.

1

**Polydoros 65kW**

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**Extension to 80 KW PL F 80**

Upgrade of POLYDOROS generator to 80 kW.

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**Ceiling rails 4.25m**

2 tracks for the ceiling-mounted support with a travel distance up to a maximum of 4.25 meters in longitudinal direction.

1

**Patient table**

Height-adjustable patient positioning table for removable tabletop:  
- Free access to table and patient from all sides  
- Height adjustment of the tabletop 42 cm: from 50 cm to 92 cm  
- Max. patient weight of 240 kg

1

**Tabletop**

Removable tabletop from carbon fibre.

Technical details:

- Size: 75 cm x 219 cm.
- Max patient coverage of 190 cm without patient repositioning.
- Radiation absorption  $\leq 1$  mm Al
- Max patient weight capacity: 240 kg

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**WLAN US**

WLAN access point for operating the MAX wi-D or MAX mini detectors

Important: USA only

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**Trolley with Display, Live Image**

Mobile display trolley with one tiltable 19" display for live image display in the examination

Qty	Item Description
	room.
	Radiation indicator on display trolley.
1	<p data-bbox="426 568 756 595"><b>DICOM WORKLIST &amp; MPPS</b></p> <p data-bbox="426 602 1270 674">Import of patient/examination data from an external RIS/HIS patient management system with DICOM MWL (Modality Worklist) as well as feedback on the examination status with DICOM MPPS (Modality Performed Procedure Step).</p>
1	<p data-bbox="426 687 724 714"><b>Control room console FL</b></p> <p data-bbox="426 721 1270 792">Remote-control console for operating full system, incl. generator and imaging system. Joystick control of system movements and touchscreen input of X-ray parameters and imaging system functions.</p>
	<p data-bbox="426 824 863 851"><del>RAXorbit - only in combination with Fluoro option</del></p> <p data-bbox="426 857 1270 902">Isocentric orbital movements around the patient keep the area of interest in focus from different angles in fluoroscopy.</p>
1	<p data-bbox="426 916 810 943"><b>Display f. Live Image in C-Room</b></p> <p data-bbox="426 949 895 972">19" display for live image display in the control room.</p>
1	<p data-bbox="426 985 783 1012"><b>Examination room console FL</b></p> <p data-bbox="426 1019 1270 1090">Trolley-mounted remote control console for operating of full system incl. generator and imaging system. Joystick control of system movements and touchscreen input of X-ray parameters and imaging system functions (optional).</p>
1	<p data-bbox="426 1104 687 1131"><b>Fluoroscopy package</b></p> <p data-bbox="426 1137 1270 1187">With the Fluoro option series from 0.5 to 8 images per second in 1,440<sup>2</sup> matrix can be made and dynamically reviewed.</p> <p data-bbox="426 1193 1270 1243">The digital acquisition process produces consistently high-quality images for all fluoroscopy-guided contrast medium examinations, skeletal acquisitions, and interventional procedures.</p> <p data-bbox="426 1274 584 1301">Operating modes:</p> <p data-bbox="426 1308 1270 1397">Digital pulsed fluoroscopy (CAREvision) with selectable pulse frequencies: 3 P/s; 7.5 P/s; 10 P/s; 15 P/s in 1024<sup>2</sup>/12-bit matrix; 30 P/s in 512<sup>2</sup>/12-bit matrix. Pulsed fluoroscopy is especially suitable for time-intensive examinations to reduce the radiation dose for physician, staff and patient.</p> <p data-bbox="426 1404 1270 1449">Displays and saves the last fluoroscopic image after radiation is switched off (Last Image Hold = LIH).</p> <p data-bbox="426 1456 1270 1500">Single image and serial mode up to 1,440<sup>2</sup>/12-bit or 1,024<sup>2</sup>/12-bit matrix (depending on zoom level).</p> <p data-bbox="426 1507 1270 1552">Serial mode (8 f/s maximum) with variable frame rate in three steps (1,440<sup>2</sup>/12-bit matrix maximum).</p> <p data-bbox="426 1559 1270 1603">DDO (Dynamic Density Optimization) for on-line harmonization of native series and single images.</p> <p data-bbox="426 1610 775 1632">Live auto-windowing during fluoroscopy</p> <p data-bbox="426 1639 743 1662">Live auto-shutter during fluoroscopy</p>
1	<p data-bbox="426 1675 687 1702"><b>Keyboard, US English</b></p> <p data-bbox="426 1709 632 1731">PS2 standard keyboard</p>
1	<p data-bbox="426 1742 683 1769"><b>External DVI interface</b></p> <p data-bbox="426 1776 1270 1825">Standard video output (DVI-D format) at the FLUOROSPOT Compact, for connecting an external recorder to record image information on video recording media.</p>
1	<p data-bbox="426 1839 596 1865"><b>Fluoroloop - C</b></p> <p data-bbox="426 1872 1270 1944">Storage and review of dynamic fluoroscopic sequences (FluoroLoop) with all available frame rates. The fluoroscopic sequence can be stored subsequently, after fluoroscopy has been performed. The maximum storable fluoroscopy time depends on the selected pulse rate.</p>

Qty

**Item Description**

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**CAREPROFILE - C**

Radiation free placement of collimator blades in the LIH.

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**Careposition C**

Radiation-free object positioning through graphic display of the X-ray center beam and the image edges in the LIH (Last Image Hold) for dose reduction.

1

**Transparent grid 13/92, F115**

Highly selective anti-scatter grid for scattered radiation reduction.

1

**Transparent grid 13/92, Universal**

Highly selective anti-scatter grid for scattered radiation reduction.

1

**Caremax plus HS Integrated**

CAREMAX plus Dose Area Product (DAP) meter tracks and displays the Dose Area Product (DAP) and/or standardized patient entrance dose.

1

**MAX wi-D**

Light-weight mobile, wireless 35 cm x 43 cm (14" x 17") detector with handgrip for comfortable and safe handling.

The detector can be used with all other MAX systems based on the MAXswap feature.

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**MAX wi-D Clip-on Grid 5/85 F115**

Grid (5/85), f 115 cm

Highly selective anti-scatter grid for scattered radiation reduction:

- Pb 5/85 (grid ratio 5:1, 85 lines/cm)

- Grid focusing for SID 115 cm (45")

1

**Charger f. MAX wi-D and MAX mini**

This charger can be used to charge the replacement batteries for the MAX mini and MAX wi-D detectors.

1

**Clinical Education & Training: Option 2**

Siemens offers multiple options for clinical education and training on your new system. These options enable a more personalized approach to the introduction to system operation, features, and benefits and will help ensure that your technologists and physicians have the opportunity to engage in the level of training that best meets your current clinical needs and business objectives.

The following items are the education and training modules are highly recommended for the operation of your new Siemens system and are most effective for sites where technologists and/or physicians have some experience on Siemens' systems. This option provides additional opportunities to learn more specialized procedures and/or the ability to further increase efficiencies.

1

**Initial onsite training 32 hrs**

Up to (32) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.

1

**Additional onsite training 24 hours**

Up to (24) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist if applicable. This educational offering must be completed (12) months from purchase date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.

Qty	Item Description
1	<p><b>Additional onsite training 16 hours</b></p> <p>Up to (16) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist if applicable. This educational offering must be completed (12) months from purchase date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.</p>
1	<p><b>Remote Mapping Acceleration</b></p> <p>For new system mapping and/or database configuration, Siemens will work remotely to configure the provided information to help accelerate the transition to the new system. The correct RIS worklist must be provided by the customer in a format specified by Siemens to prepare the new parameters for loading into the new system. This educational offering must be completed the later of (12) months from install end or purchase date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.</p>
2	<p><b>e.learning CEU subscription (12 mths)</b></p> <p>This (12) month multi-modality e.learning subscription will provide access for (10) imaging professionals at the customer site to utilize up to (50 CEUs). This educational offering must be completed (12) months from date of purchase order. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.</p>
1	<p><b>Standard Rigging Fluoro</b></p>

Outbound deinstall

Project # 2016-2219, Philips Easy Diagnost system, de-install: 7/2017, expires: 12/30/2016 @ (\$0.00) Scrap

Inbound Additional Rigging @

Siemens Medical Solutions USA, Inc.  
40 Liberty Boulevard, Malvern, PA 19355



SIEMENS REPRESENTATIVE  
Jason Seffel - (918) 760-9729

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## ALTERNATE PRODUCTS

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## ALTERNATE PRODUCTS

Qty

Item Description

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**Trolley w/ 2 Displays, Live/Ref Im.**

Mobile display trolley with two 19" flat displays for live and reference image display in the examination room.

Radiation indicator on display trolley.

*This item has been quoted as a substitute for Part No. 14443424 - "Trolley with Display, Live Image" that has been included in the quotation.*

1

**Ceiling rails 5m**

2 tracks for extending the travel distance of the ceiling-mounted support up to a maximum of 5 meters in a longitudinal direction.

*This item has been quoted as a substitute for Part No. 14443413 - "Ceiling rails 4.25m" that has been included in the quotation.*

## OPTIONS

Qty

### Item Description

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#### **Patient positioning mattress**

The radiolucent table pad matches the size of the tabletop and has a heavy-duty soft plastic cover that is easy to clean. The soft cushion allows comfortable patient positioning and repositioning. To prevent the pad from sliding during head-up positions, the straps of patient table pad can be attached to the grip protection rail at the head end.

1

#### **Compression Belt**

Belt compression device with a radiolucent plastic belt. Compression is achieved by means of an easy to clean, radiolucent plastic belt with a ratcheting tension lever.

##### Application:

The compression belt is used for patient compression during thoracic or abdominal examinations as well as for immobilizing restless or frail patients.

##### Advantages of compression:

- Quick and safe securing of patient to the tabletop.
- Reduction of patient thickness, i.e. improvement of image quality through reduction of scattered radiation.

1

#### **Additional onsite ortho training 12 hours**

Up to (12) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist if applicable. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.

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#### **DVD for Fluoro Recording**

Direct output of fluoroscopy and image series on DVD recorder.

1

#### **Multi Modality Viewing**

1

#### **Paper roll holder**

The paper roll holder is an accessory for inserting a paper roll. The holder is attached to the end of the table; the paper roll is inserted slightly below the table height. Paper rolls of different diameters and lengths may be used.

1

#### **SmartOrtho License**

SmartOrtho is an automated tilting technique for long leg and full spine imaging. Up to 4 single images can be acquired to cover the selected region with the patient in standing or lying position. The images are automatically composed into a single image on the imaging system.

1

#### **Ortho Stand**

The Ortho support stabilizes the patient during the Ortho examination, such as

Qty

**Item Description**

long leg and long spine imaging to prevent motion artifacts. It places the patient in an upright position and allows safe movement of the bucky tray during the image acquisition procedure.

The package includes:

- Ortho ruler
- Ruler holder
- Patient hand grips, left and right
- Additional platform for smaller patients (e.g. children) and to make sure that the whole patient body can be mapped - removable

1

**Transparent grid 15/80, F300**

Highly selective anti-scatter grid for scattered radiation reduction.

1

**Wall holder for grid**

Holder for safe storage of exchangeable grids. Can be mounted to the wall.

1

**syngo X WP Real 3D**

syngo X Workplace high-end post processing workstation, comprising Windows XP PC with syngo-based user software and network modules.

1

**Real 3D tableside**

Tableside trajectory for Real 3D acquisitions of upper extremities. Patient positioning supine on the patient table with arm fixated to an armrest. X-ray tube and RAX detector rotate around the extended extremity next to the patient table.

1

**Real 3D lying**

Set of trajectories for Real 3D acquisitions of the patient lying on the table. Trajectory around the table top for Real 3D acquisitions of the trunk of the body and lower extremities. Trajectory around the head end of the table for Real 3D acquisitions of the skull and the cervical spine.

1

**Real 3D weight bearing**

Trajectory for Real 3D acquisitions of the patient in an upright position. X-ray tube and RAX detector rotate freely around the standing or sitting patient. This enables Real 3D imaging under natural weight-bearing conditions, even of the hip and spine. Includes fully radiotransparent 3D stand to support the patient during examinations while standing.

1

**Fixation straps**

Optional fixation straps for the 3D support for patient support.

1

**Grid 13/92, F115 3D**

Highly selective anti-scatter grid for 3D examination of standing or lying patients.

# Detailed Technical Specifications

## Description

### **Basic system components:**

- Ceiling-mounted tube assembly support with X-ray tube and motorized multileaf collimator
- Ceiling-mounted detector arm with an integrated detector for static, dynamic and 3D imaging
- An imaging and control station with application and evaluation programs, as well as DICOM system interfaces.
- CD/DVD drive for digital image storage on CD-R/DVD for offline data exchange in DICOM format

### **Tube assembly support**

with X-ray tube assembly and motorized collimator.

All projection-relevant tube assembly positions can be manually adjusted with servo-motor support with handles symmetrically mounted to the tube assembly collimator unit.

The ceiling-mounted tube assembly support can be adjusted in 3 axes for longitudinal, transverse, and height adjustment (x, y, and z-axes).

- Horizontal travel range in longitudinal direction 355 cm.
- Horizontal travel range in transverse direction 346 cm.
- Vertical lift 180 cm.

In 2 further axes ( $\alpha$ - and  $\beta$ -axes) the tube assembly collimator unit can be manually adjusted for oblique acquisitions of the recumbent patient, or for horizontal, oblique, or lateral acquisitions on the portable detector, or for free bedside acquisitions.

- Rotation around the vertical axis of the ceiling-mounted support from  $+154^\circ$  to  $-182^\circ$ . Lock-in positions every  $90^\circ$ .
- Rotation around the horizontal axis of the tube assembly support arm  $\pm 140^\circ$ . Lock-in positions at  $0^\circ$  and  $\pm 90^\circ$ .

### **X-ray tube assembly OPTITOP 150/40/80 HC-100:**

Single-track dual-focus rotating anode tube with compound anode (rhenium-tungsten, molybdenum, graphite), with high heat storage capacity and high load capacity for small focal spots. Integrated overpressure safety device in the tube protective housing.

- 150 kV nominal voltage acc. to IEC 613.
- Nominal power (focal spot nominal values acc. to IEC 336):  
40 kW: small focus 0.6  
80 kW: large focus 1.0
- Anode speed  $\geq 8.500$  r/min, anode angle  $12^\circ$ .
- Heat storage capacity of the anode 580 kJ (783 KHU) acc. to IEC 613.
- Total filtration (IEC 601-1-3)  $\geq 2.5$  mm Al equiv.

### **Multileaf collimator:**

With full field and laser line light localizer. Rectangular collimation, manual and motorized, via organ programs.

- Multileaf collimator rotatable by  $\pm 45^\circ$  around the center beam axis, e.g. for correct positioning of objects.
- A tape measure is integrated to check the focus-to-object distance.
- To improve radiation quality through dose reduction of the soft radiation parts, Cu prefilter (0.1 mm; 0.2 mm and 0.3 mm) are inserted into the primary beam projection, depending on the organ program selected. They can also be selected manually.

### **Option:**

A measuring chamber for the Dose Area Product can be integrated into the multileaf collimator.

## Description

### **Twin FAST**

Automatically position of tube and detector to a programmed position.

### **RAXalign**

Automated tube-to-detector and detector-to-tube alignment, leading to undistorted images without grid cut-offs.

### **RAXtilt**

Automated 90° tilt of both the detector and tube head. Combined with dual robotic automation, this allows cross-table and lateral exams without the need for patient repositioning.

### **RAXtrack**

Automated tracking of tube and detector in all axes and angles

### **RAX arm**

Detector arm for high speed and safe positioning with robotic precision in up to five axes simultaneously.  
- 180 cm vertical travel range

### **RAX detector**

High resolution dynamic detector, developed for radiographic and fluoroscopic exams.

#### Technical specs:

- Material: a-Si with CsI scintillator
- Detector size: 43 cm x 43 cm
- Pixel size: 148 µm (6,76 Pixel per mm)
- Physical matrix size: 2880 x 2880 (8.3 Million Pixel)
- Active matrix size: 2840 x 2874 (8.2 Million Pixel)
- Spatial resolution: 3.4 Lp/mm
- Digitization depth: 16 bits

### **RAXconfirm**

fluoro positioning capability for challenging radiography exams - in order to save retakes.

### **Controls and displays**

The control elements at the tube assembly and the multileaf collimator are ergonomically arranged for single-handed operation.

Controls and displays at the tube assembly support (MAXtouch):

Multifunctional control display with color touchscreen for adaptation of acquisition parameters directly in the examination room.

#### Displays include:

- The collimation size of the acquisition field (in cm x cm).
- The selected SID.
- The selected Cu additional filters.
- Rotation from the 0-position.
- Tube assembly and detector centering.
- Operating states such as "ACSS/Manual", "Ready", "Selected", etc.
- Current detector angle (MAXalign feature) - to eliminate the need to guess the tube angle and to protect the patient by reducing repeat exposures. Available with MAX wi-D and MAX mini.

The display follows the tube assembly orientation.

#### The following functions can be set manually at the multileaf collimator:

- Full field light localizer with timer for optical display of the collimated acquisition format and an optionally coverable laser line light localizer.

## Description

- The collimation of the acquisition format set last can be retrieved via a memory button.
- The rectangular collimation of the radiation field is pre-defined through the organ program and can be set manually by means of two dials.
- The motorized insertion of the Cu additional filters is controlled via the organ program, but can also be selected freely.

### Imaging and control station (syngo FLC)

The entire control and communication of the Twin Robotic X-ray scanner incl. digital image processing takes place from a central operating site - the imaging and control station.

#### It includes:

- A high-end PC imaging system, based on Windows 7 with *syngo* user interface.
- Storage of original data 14 bit.  
Storage of image data 12 bit.  
Storage capacity approx. 10,000 images.
- Keyboard and mouse.
- One 19" color flat-screen as control display or diagnostic display.
- Manual button for exposure release.

### Functions of the imaging and control station

#### Patient and study administration:

- Importing of patient lists and examinations from the HIS/RIS
- Manual patient registration
- Patient, study, and image data management
- Configuration functions

#### Acquisition and post-processing:

- Organ program selection and configuration
- Selection of generator and diaphragm parameters.  
Parameterization of image preprocessing: enhancement, harmonization, edge enhancement, and look-up tables (LUT)
- Display of current acquisition 1.5 s preview image; 3.5 seconds full image
- Display of image markers (L/R, a.p./p.a.)
- DiamondView Plus: multi-scaling procedure for image post-processing with high detail contrast and reduced noise

DiamondView is a multi-scale procedure, i.e. filter size and strength are weighted differently and are used for adaptation to the overall image content.

- DiamondView enhances the signal exploitation of the dynamic range and improves the organ-specific detail contrast (soft tissue and bone).
- DiamondView can be selected via the "Pre-processing card".
- By entering "0", the image can be displayed without DiamondView.

#### Image processing functions:

- Image rotation
- Horizontal/vertical image mirroring
- Image zoom
- Pan
- Windowing
- Filters for edge enhancement and noise reduction

#### Image documentation and archiving:

- Image transfer to the network
- Automatic, user-configurable data distribution (DICOM Send, see also system interfaces DICOM)

## Description

- Automatic filming with virtual film sheet (DICOM Print, see also system interfaces DICOM)
- Image data export (12 bit) on CD/DVD

### Password protection:

System access protected by password.

### Option:

Security Package: SW option with enhanced security features such as User Management and Audit Trail function (if offered, see text of the corresponding components).

### **DICOM system interfaces**

- DICOM Send: Sending of images into the DICOM network.  
The DICOM Send function enables fully automatic transfer of generated image data to a DICOM archive or a DICOM workstation. The user can perform his examinations without interruption while the system fully automatically transfers the images to the archive. This image data transfer takes place entirely in the background and thus does not affect acquisitions performed at the same time.
- DICOM Storage Commitment (StC): Feedback from the image archive.  
The DICOM StC function automatically gives feedback on whether the generated image data were successfully transferred. This way the user can be sure that the acquisitions stored locally in the imaging system can be deleted.
- DICOM Print: Printing of images by means of a virtual film sheet on a DICOM laser camera.  
Selecting "Auto-Print" automatically forwards the images stored in the virtual film sheet to the laser camera. This optimizes the workflow, eliminating the need for user interaction. In addition, a specific layout can be configured on the virtual film sheet, which the user can review and edit on the monitor at any time. As a result, printing is only required after the layout has been optimized on the monitor, saving time and costs.

### Options:

- DICOM Modality Worklist/MPPS
- DICOM Query/Retrieve

### **Note concerning DICOM interface(s)**

For diagnostic purposes, only hardcopy cameras/laser printers explicitly approved for this system may be used.

The description in the "DICOM Conformance Statement" downloadable from the Internet is exclusively binding for the functionality of the DICOM interface(s).

Functionalities across system borders with/between partner systems require explicit validation, since the interpretation of the interface by the partner/target system is not part of the product's responsibility.

A modification of the interface that might be required is not included in the offer; e.g. for the rare case that available configurations are not sufficient. With regard to expenses for interface configurations that might be required, the agreements on maintenance/service of the product apply.

### **syngo Remote Assist**

*syngo* Remote Assist is a standalone service option.

With *syngo* Remote Assist, Siemens uses a secure broadband VPN connection (VPN = virtual private network) to establish a connection to your Siemens imaging console in order to offer you direct, real-time support and training. This seamless and simultaneous virtual interaction will contribute to improvements in image quality and optimization of system use.

### **Siemens Remote Service**

Prepared for optional Siemens Remote Service SRS (during warranty period, subsequently with service contract):

- Hardware and software remote diagnosis.
- System remote configuration, e.g. adding of a DICOM node.
- Early warning system to secure system operation.
- Functions according to the selected maintenance package.

**Customer Care. Life - the customer care solution by Siemens Healthcare**

## Description

From the moment you purchase your Siemens system you will benefit from many services that are offered by "Customer Care. Life" offers, e.g.:

- initial application training
- interactive e-learning for various applications
- free customer magazines
- arrangements for clinical training via a global network
- and free trial licenses

You will find detailed information on our e-learning program and further details on general "Customer Care. Life" services on the internet.

\* "Customer Care. Life" offerings are not necessarily available to the full extent for all systems.

High-frequency X-ray generator with multipulse voltage waveform for diagnostic acquisition techniques. The multipulse voltage waveform enables high data accuracy, precise reproducibility and short exposure times.

- Rating:  
65 kW at 100 kV acc. to IEC 60601-2-7.  
max. 800 mA at 79 kV
- Tube voltage 40 kV to 150 kV.
- Fluoroscopy, 450 W from 40 kV/0.2 mA to 110 kV/23 mA, pulsed fluoroscopy
- Shortest exposure time 1 ms (with IONTOMAT automatic exposure control). Free selection of the exposure data in 3- and 2-point technique.
- 1-point technique with continuously falling load (with IONTOMAT).
- Plani-IONTOMAT for tomography (option).
- CAREMATIC system for 0-point technique.
- Time and mAs post indication (with IONTOMAT operation).
- Fluoro mean value indication.
- Organ programs can be edited by the user.
- Tube load computer with opto-acoustic warning indicator.

Power connection:

3 phase current: 400 V (-15, +10%); 50/60 Hz.

Option: 440/480 V.

Increased performance to extend the range of application:

- 80 kW at 100 kV (IEC 60601-2-7), 1,000 mA at 79 kV.
- Fluoroscopy, 450 W from 40 kV/0.2 mA to 110 kV/23 mA, pulsed fluoroscopy

TFT technology with high luminance and extended viewing angle.

- 19" (48 cm) monitor
- Resolution: 1280 x 1024 pixels
- Maximum brightness (typ.):  $\leq 1000$  cd/m<sup>2</sup>
- Flicker-free and distortion-free image display.
- Ambient light sensor for optimum adaptation of the image display to the room brightness.

### DICOM MWL (Modality Worklist):

Import of patient/examination data from an external RIS/HIS patient management system.

### DICOM MPPS (Modality Performed Procedure Step):

Sending of dose data, patient data, and examination data to an external RIS/HIS patient management system.

### Note concerning DICOM interface(s)

The description in the "DICOM Conformance Statement" downloadable from the Internet is exclusively binding for the functionality of the DICOM interface(s).

## Description

Functionalities across system borders with/between partner systems require explicit validation, since the interpretation of the interface by the partner/target system is not part of the product's responsibility.

A modification of the interface that might be required is not included in the offer; e.g. for the rare case, that available configurations are not sufficient.

With regard to expenses for interface configurations that might be required, the agreements on maintenance/service of the product apply.

TFT technology with high luminance and extended viewing angle.

- 19" (48 cm) monitor.
- Resolution: 1280 x 1024 pixels
- Maximum brightness (typ.):  $\leq 1000 \text{ cd/m}^2$
- Flicker-free and distortion-free image display.
- Ambient light sensor for optimum adaptation of the image display to the room brightness.

Radiation-free positioning of primary collimators in the LIH on the monitor. Especially suitable for dose-saving examinations.

With CAREposition it is possible to position an object without radiation under visual control. In case of table movement, the current radiation field position and the center beam position are superimposed on the LIH as orientation points.

Technical details:

- Grid ratio 13:1, 92 lines/cm
- Siemens lead/fibre technology
- Grid focusing for source-image-distance (SID) of 115 cm (45")

Technical details:

- Grid ratio 13:1, 92 lines/cm
- Grid focusing for source-image distance (SID) of 140 cm (55");
- Working range (SID) 115 cm to 180 cm (45" to 71")
- Siemens lead/fibre technology

CAREMAX plus Dose Area Product (DAP) meter is connected to the collimator via CAREMAX adapter cable. The Dose Area Product (DAP) is being displayed on the FLC image system and recorded in the exam protocol.

Technical details:

- Cesium iodide (CsI) scintillator with Amorphous silicon (a-Si) material
- Detector acquisition matrix approx.: 2872 x 2354
- Pixel size: 148  $\mu\text{m}$
- Acquisition depth (gray scales): 16 bits
- Acquisition formats up to: 34.9 cm x 42.5 cm (13.7" x 17").
- Thickness: 19 mm
- Detector weight: 3 kg
- Max. load 150 kg (patient lying down) and 100 kg (patient standing).
- MAX wi-D - 1 battery
- Data transfer via W-LAN.

Operation time:

## Description

- At least 525 images
- Min. 3.5 hours under normal load
- Min. 6 hours in standby mode

### Technical details:

- Grid ratio 5:1, 85 lines/cm
- Siemens lead/fibre technology
- Grid focusing for source-image-distance (SID) of 115 cm (45")
- Dimensions (W x H x D): 472.1 mm x 410.1 mm x 28.4 mm (18.58"x 16.14"x 1.1")
- Weight: 1.1 kg (2.4 lbs)

Space for 3 batteries, with LED indicator for charge status. The charger connects to a wall socket using a power cord.

This item includes the following components:

- 1x battery charger
- 1x power supply
- 1x battery

TFT technology with high luminance and extended viewing angle.

- 19" (48 cm) monitor.
- Resolution: 1280 x 1024 pixels
- Maximum brightness (typ.):  $\leq 1000$  cd/m<sup>2</sup>
- Flicker-free and distortion-free image display.
- Ambient light sensor for optimum adaptation of the image display to the room brightness.

### Technical details:

- Length: 198 cm (78")
- Width: 66 cm (26") (of which 53.5 cm is padded)
- Thickness: 2.5 cm (1")
- Weight: 2.7 kg (5,9")

### SW license for Ortho function

- For systems with bucky wall stand:  
Ability to acquire up to 4 images of the legs or spine in sequence on the Bucky wall stand using a MAX wi-D, MAX static detector

#### Only for Ysio:

Ability to acquire up to 3 images at the patient table.

#### Only for Multitom Rax:

Ability to acquire up to 4 images of the legs or spine with RAX detector (patient in standing position or lying on the table)

### Spine Composing

Spine Composing takes individually acquired digital radiographic images of the spine and composes them into an overall image.

#### The main functions are:

- automatic composing of digital radiographs into an overall image
- standard image post-processing functions are available

### Ortho-Leg Composing

Ortho-Leg Composing takes individually acquired digital radiographic images of the legs and

<p><b>Description</b></p> <p><u>The main functions are:</u></p> <ul style="list-style-type: none"> <li>- automatic composing of digital radiographs into an overall image</li> <li>- standard image post-processing functions are available composes them into an overall image.</li> </ul>
<p>Technical details:</p> <ul style="list-style-type: none"> <li>- Dimensions (depth x width x height): 75 cm x 75 cm x 202 cm (30" x 30" x 80")</li> <li>- Weight: 85 kg ( 187 lbs)</li> <li>- Maximum patient weight capacity: 180 kg (397 lbs)</li> <li>- Patient height: Up to 190 cm / 74" (standing)</li> </ul>
<p>Technical details:</p> <ul style="list-style-type: none"> <li>- Grid ratio 15:1, 80 lines/cm</li> <li>- Siemens lead/fibre technology</li> <li>- Grid focusing for source-image distance (SID) of 300 cm (118")</li> </ul>
<p>Holder with two slots of different widths.</p> <p>Weight: 5.0 kg (11 lbs)</p>
<p>The functionality of the syngo X Workplace Real 3D is based on the syngo X WP. The intended use is the 3D workstation for reconstruction and display of Real 3D data from the Multitom Rax. It can be extended with additional software functions to suit specific user or clinical needs. The use of the licensed software is limited exclusively to the specific syngo X Workplace included with this configuration.</p> <p>The base viewing system can be extended by adding a wide range of application options.</p> <p><b>Scope of delivery</b></p> <ul style="list-style-type: none"> <li>- syngo X Workplace PC</li> <li>- syngo X Workplace Basic User Software</li> <li>- Real 3D reconstruction Software integrated in the 3D viewer package</li> </ul> <p><b>syngo X Workplace PC</b> High-performance workstation based on Windows 7 with Intel Xeon CPU, 32 GB RAM and SSD hard drive with 512 GB for image data. The workstation is equipped with an Open GL accelerator board to support 3D applications. To exchange medical images on DICOM-compatible CD-Rs and DVDs, the system is equipped with a CD/DVD burner. syngo X Workplace can be connected to an existing network via Gigabit/100 Mbit Ethernet.</p> <p><b>syngo X Workplace Basic User Software</b> The syngo X Workplace software features an intuitive and thus easy to learn user interface developed from prototypes tested in close cooperation with users.</p> <p>Standard functions such as filming or image review, and optional clinical application software, are performed in individual processes on dedicated task cards. A number of functions and input parameters, as well as the language used, can be selected according to individual requirements.</p> <p><b>Package comprising the following software licenses</b> Basic software with CD and dongle for the following functions:</p> <ul style="list-style-type: none"> <li>- Patient Browser,</li> <li>- Filming,</li> <li>- Viewer,</li> <li>- System services.</li> </ul> <p><b>Patient Browser</b></p> <ul style="list-style-type: none"> <li>- Patient management.</li> </ul>

<p><b>Description</b></p> <ul style="list-style-type: none"> <li>- DICOM communication with Send, Receive, Query/Retrieve, Print.</li> <li>- Reading of CDs/DVDs.</li> <li>- Module for writing DICOM CDs/DVDs for data exchange. Writing is in background mode.</li> </ul> <p><b>Filming</b> A virtual filmsheet shows a 1:1 display of the film sheets to be printed. This permits an effective preview of the filming job and the windowing of images, as well as providing a large number of evaluation functions.</p> <p><b>Viewer</b> The Viewer task card supports interactive 2D review, evaluation, and documentation functions. Multiple studies from the same patient can be displayed side-by-side for comparison.</p> <ul style="list-style-type: none"> <li>- Image display: 1.024<sup>2</sup> screen matrix, configurable with up to 64 image segments.</li> <li>- CINE display: Automatic or interactive dynamic presentation technique for the visualization of time and volume series.</li> </ul> <ul style="list-style-type: none"> <li>- Synchronized viewing of multiple series.</li> <li>- Measurement and annotation: Text annotation; distance, angle, circle, ROI and pixel lens, depending on information available from the acquisition system.</li> </ul> <p><b>System services</b> Microsoft Office 2003 Word, Excel, PowerPoint plus Outlook are supported (not provided!).</p> <ul style="list-style-type: none"> <li>- Any user-selectable file, such as AVI video sequences, can be burned to CD to prepare quality presentations and demos of pathologies.</li> <li>- Network module: For connection to a local Ethernet (Gigabit or 100 Mbit) for communication with networked archives, printers, diagnostic and therapy workstations, and teleradiology routers.</li> </ul> <p>Scope of functions:</p> <ul style="list-style-type: none"> <li>- Network stations can be configured.</li> <li>- Unlimited selection of stations.</li> </ul> <p><b>DICOM</b> Industrial standard for the transmission of information between DICOM-compatible equipment from different manufacturers. The scope of functions is described in detail in the DICOM Conformance Statement and in its standard version includes the Transmission/ Reception, Query/ Retrieve and Basic Print functions.</p> <p><b>Note concerning DICOM Interface(s)</b> For diagnostic purposes, only hardcopy cameras/laser printers explicitly approved for this system may be used.</p> <p>The description in the DICOM Conformance Statement downloadable from the Internet is exclusively binding for the functionality of the DICOM interface(s).</p> <p>Functionalities across interfaces with/between partner systems require explicit validation, since the interpretation of the interface by the partner/target system is not part of the product's responsibility.</p> <p>A modification of the interface that might be required is not included in the offer; e.g. for the rare case that available configurations are not sufficient. With regard to expenses for interface configurations that might be required, the agreements on maintenance/service of the product apply.</p> <p>Technical details:</p> <ul style="list-style-type: none"> <li>- Variable source-to-object distances (SOD) and source-to-image distances (SID)</li> <li>- Scan angle: 200°</li> </ul>
<p><b>Description</b></p>

## Description

- Number of projections: 192
- Scan time: 24s
- Includes armrest to be mounted to the tabletop (14443441)

### Technical details:

- Variable source-to-object distances (SOD) and source-to-image distances (SID)
- Scan angle: 163° (table) / 183° (head end)

- Number of projections: 152

- Scan time: 20s

### Technical details:

- Variable source-to-object distances (SOD) and source-to-image distances (SID)
- Scan angle: 188°
- Number of projections: 160
- Scan time: 20s

With the fixation straps it's possible to support the patient at the 3D support for standing 3D examination to avoid movement artefacts.

The orientation of the grid lines is adapted to the examination modes Real 3D lying and Real 3D weight bearing. The grid is needed to filter scatter radiation during the 3D examination. One grid is needed if the option Real 3D lying or Real 3D weight bearing (or both) is selected.

### Technical details:

- Grid ratio 13:1, 92 lines/cm
- Siemens lead/fibre technology
- Grid focusing for source-image-distance (SID) of 115 cm (45")