

V.A. MEDICAL CENTER
10 CALLE CASIA
SAN JUAN, PR

PO# 672-FC3012

Luminos Agile

All items listed below are included for this system: (See Detailed Technical Specifications at end of Proposal.)

Qty	Item Description
1	Lum. Agile w/ Ysio Opt. f. wi-D Fully digital undertable system for fluoroscopy with integrated, tableside system control on the image receptor, with user interface for ambidextrous operation. High-resolution dynamic flat detector 43 cm x 43 cm for fully digital image chain with network connectivity in DICOM standard: Send, Print and Storage Commitment. DICOM DVD / CD burner. Height-adjustable patient table, tiltable from vertical to 20° Trendelenburg position. Undertable X-ray tube assembly OPTITOP 150/40/80HC-100 with undertable multileaf collimator and 65kW HF X-ray generator. CAREvision for pulsed fluoroscopy. One (1) b/w 19" high-contrast flatscreen display for live image. CAREmax measuring chamber for acquisition of the dose-area product. Ceiling-mounted tube assembly support fully motorized in all projection-relevant axes with up to 220 cm transverse travel, for 2nd plane and detector acquisition system acquisitions, with a detector tray and wireless flat detector, including IONTOMAT three-field chamber. OPTITOP 150/40/80 X-ray tube assembly and multileaf collimator with full field and laser line light localizer.
1	wi-D (wireless detector) Mobile, wireless flat detector, with loading and receiving unit for the wireless detector.
1	System covers Cover for systems without compression device.
1	Upgrade to 80 kW PLF Upgrade of POLYDOROS generator to 80 kW.
1	DICOM WORKLIST & MPPS 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).
1	Standard keyboard English, US Standard keyboard.
1	Trolley with 1 Display, b/w Mobile display trolley with one monochrome 19" flat display with blue background color. Radiation indicator on display trolley.
1	Clip-on grid for detector Grid (5/31), f 115 cm Highly selective anti-scatter grid for scattered radiation reduction: - Pb 5/31 (grid ratio 5:1, 31 lines/cm). - Grid focusing for SID 45"/115 cm. Weight: 2.8 kg

Qty	Item Description
1	<p>Transparent grid 15/80, F115</p> <p>Highly selective anti-scatter grid for scattered radiation reduction: Pb 15/80 (grid ratio 15:1, 80 lines/cm). Grid focusing for source-image distance (SID) of 115 cm. Note: Depending on the country, a grid with a 15:1 grid ratio or 80 lines/cm has to be used for pediatrics. In this case, use the wi-D detector in Portrait format.</p>
1	<p>Fully synch. ceiling-mtd. stand, 3m</p> <p>Tube assembly support with X-ray tube assembly and motorized multileaf collimator.</p>
1	<p>Bucky Wall Unit for wi-D left</p> <p>Floor-mounted Bucky wall stand with height-adjustable detector Bucky for accommodating a mobile, wireless flat detector for digital acquisitions or for similar acquisitions using CR cassette. With IONTOMAT three-field chamber and Bucky frame. Detector Bucky operated from the left side.</p>
1	<p>Transparent grid 13/92, Universal</p> <p>Highly selective anti-scatter grid for scattered radiation reduction: Pb 13/92 (grid ratio 13:1, 92 lines/cm). working range (SID) 115 to 180 cm, grid focusing 140 cm. Recommended for use in the table and Bucky wall stand. Improved workflow due to fewer grid changes</p>
1	<p>Lateral detector holder</p> <p>Detector holder for wi-D for cross-table direct exposures with lateral beam path and horizontal tabletop. The detector holder supports the detector in an upright position on the horizontal tabletop according to the desired cross-table exposure. Weight: 5.3 kg</p>
1	<p>Customer documentation, English</p>
1	<p>Initial onsite training 32 hrs</p> <p>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.</p>
1	<p>Initial onsite training 12 hrs</p> <p>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. 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.</p>
1	<p>Additional onsite training 24 hours</p> <p>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 install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.</p>
1	<p>Portable DR Panel Protector</p>
1	<p>Standard Rigging Fluoro</p>
1	<p>AXD BTL Deinstallation</p>
1	<p>Budgetary Add'l/Out of Scope Rigging</p>
1	<p>Offset onsite Training 24 hrs</p>
1	<p>Offset onsite Training 12 hrs</p>
1	<p>Biomedical Training AXD</p>

OPTIONS:

Qty	Item Description
1	CAREPROFILE - C Radiation free placement of collimator blades in the LIH.
1	Fluoroloop - C Storage and review of dynamic fluoroscopic sequences (Fluoro Loop) 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.
1	DVD for Fluoro Recording Direct output of fluoroscopy and image series on DVD recorder in MPEG4 format.

Detailed Technical Specifications

Luminos Agile

Part No. / Product	Description
<p>14428644 Lum. Agile w/ Ysio Opt. f. wi-D</p>	<p>System configuration Luminos Agile is a highly versatile undertable X-ray diagnostic system meeting all requirements with respect to use, image quality, connectivity and low-dose. The Luminos Agile features an ergonomic tableside user interface for ambidextrous use. and is specially designed to accommodate the growing population of obese and bariatric patients.</p> <p>Patient positioning Patient positioning table easily accessible from all sides, tiltable from +90° to max. 20° Trendelenburg position.</p> <ul style="list-style-type: none"> - Table height adjustable from 65 to 112 cm (min. fluoro height 82 cm) - Patient positioning tabletop 210 cm x 80 cm with examination range over the entire radiolucent part (193 cm x 53 cm). Motorized longitudinal travel ± 80 cm and transverse travel ± 17.5 cm. - Foot rest insertable at head or foot end, up to a load of 230 kg. - Comprehensive collision protection within the travel range of the image receptor. <p>Patient weight:</p> <ul style="list-style-type: none"> - Up to 182 kg (400 lbs) No limitation for tabletop movement longitudinal ±80 cm from center position, table tilt is permitted. - From 182.1 kg to 230 kg (400.1 lbs to 507 lbs): Longitudinal travel of tabletop limited to ±40 cm from center position, table tilt is permitted. - From 230.1 kg to 275 kg (507.1 lbs to 606 lbs): Tabletop movement and table tilt are not permitted. <p>Flat detector image receptor</p> <ul style="list-style-type: none"> - Distance focus - tabletop 60 cm. - SID from 89 cm to 125 cm. - Primary collimator with rectangular format. - Highly selective anti-scatter grid Pb 15/80, grid ratio 15:1, 80 lines/cm. Grid focusing for SID 100 cm. <p>Transparent grids improve the image quality by reducing scattered radiation on the film.</p> <p>Flat detector: The digital high-resolution dynamic flat detector with integrated removable grid is especially designed to fulfill the requirements of general and interventional applications.</p> <ul style="list-style-type: none"> - Semi-conductor material: Amorphous silicon (a-Si) with CsI-scintillator - Size 43 cm x 43 cm - Pixel size: 148 µm (6.76 pixel per mm) - Matrix size: 2,880 x 2,880 (8.3 million pixels) - Detail resolution: 3.4 LP/mm - Acquisition depth: 16 bits <p>148 µm pixel arrays provide highest spatial resolution and excellent contrast. Fluoroscopy as well as image acquisition are always done in 14-bit gray scale resolution, allowing excellent detail visibility. Acquisition frame rates of up to 8 f/s are possible.</p> <p>Usable input formats:</p> <ul style="list-style-type: none"> - Overview: 43 cm x 43 cm; diagonal 60 cm. - Zoom 1: 30 cm x 30 cm; diagonal 42 cm.

Part No. / Product	Description
<p>(Continued) 14428644 Lum. Agile w/ Ysio Opt. f. wi-D</p>	<ul style="list-style-type: none"> - Zoom 2: 22 cm x 22 cm; diagonal 32 cm. - Zoom 3: 15.5 cm x 15.5 cm; diagonal 21 cm. <p>operation Ergonomic tableside user interface on the system, comfortable for both left- and right-handed users. Integrated system operation and total tableside examination control.</p> <ul style="list-style-type: none"> - OPTI Grip for fast and easy movement of the flat detector image receptor and single-handed system operation. - Touch user interface for interactive control of all system functions. <p>Foot switch: The footswitch combination with two separate switch pedals provides ergonomic work support. During fluoroscopy-guided patient examinations, the user's hands remain free for the examination. Fluoroscopy is switched on and off by foot. During fluoroscopy, targeted radiographic acquisitions can be released by foot, as well.</p> <p>Accessories included in basic version</p> <ul style="list-style-type: none"> - Hand grip, front, axial adjustment. - Hand grip rail, back, axial adjustment. - Grip protection rail, head end, removable. - Shoulder supports (1 pair), three-dimensional adjustment. - Foot board, axial adjustment by 44 cm, can be used at head end or foot end. - Protective film for fluids - Radiation protection, complete - Counterweight for radiation protection <p>OPTITOP 150/40/80HC-100 undertable X-ray tube assembly Single track dual focus rotating anode tube with compound anode (rhenium-tungsten, molybdenum, graphite) with high heat storage capacity and high thermal load capacity for small focal spots.</p> <ul style="list-style-type: none"> - Nominal voltage 150 kV max. - 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°. - Heat storage capacity of the anode 580 kJ (783 kHU) acc. to IEC 613. - Total filtration (IEC 601-1-3) 2.5 mm Al equi. <p>Multileaf collimator Undertable multileaf collimator with rectangular collimation for automatic format collimation. Motor-driven Cu prefilters.</p> <p>CAREmax Electronic unit with KermaX-Plus, a measurement chamber integrated into the collimator housing for acquisition and fluoro systems to record the dose area product and/or standardized patient entry dose.</p> <p>Detector tray Detector tray with automatic format selection ACSS (automatic cassette size sensing) for acquisitions with the fully-synchronized Ysio ceiling support as 2nd plane. It is positioned underneath the patient positioning tabletop and has a longitudinal travel range of 100 cm.</p> <p>The detector tray includes:</p> <ul style="list-style-type: none"> - A device for symmetric positioning of the flat detector. - IONTOMAT three-field chamber for automatic exposure control. - Table-detector distance \leq 6.3 cm.

Part No. / Product	Description
<p>(Continued) 14428644 Lum. Agile w/ Ysio Opt. f. wi-D</p>	<p>Automatic servo tracking of the tray (at the table level and for source-image distance). Automatic parking of the tray when selecting a fluoro organ program.</p> <p>Fully-synchronized Ysio X-ray tube support with X-ray tube assembly and motorized collimator.</p> <p>All projection-relevant tube assembly positions can be manually adjusted with handles symmetrically mounted to the tube assembly collimator unit.</p> <p>The ceiling-mounted tube assembly support can be adjusted in 3 axes for longitudinal, transverse, and height adjustment (x, y, and z-axes).</p> <ul style="list-style-type: none"> - Horizontal travel range in longitudinal direction 346 cm. - Horizontal travel range in transverse direction 220 cm. - Vertical lift 180 cm. <p>In 2 further axes (α- and β-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.</p> <ul style="list-style-type: none"> - Rotation around the vertical axis of the ceiling-mounted support from +154° to -182°. Lock-in positions every 90°. - Rotation around the horizontal axis of the tube assembly support arm $\pm 140^\circ$. Lock-in positions at 0° and $\pm 90^\circ$. <p>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.</p> <ul style="list-style-type: none"> - 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°. - Heat storage capacity of the anode 580 kJ (783 kHU) acc. to IEC 613. - Total filtration (IEC 601-1-3) ≥ 2.5 mm Al equiv. <p>Multileaf collimator: With full field and laser line light localizer. Rectangular collimation, manual and motorized, via organ programs.</p> <ul style="list-style-type: none"> - 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 filters (0.1Cu; 0.2 CU and 0.3 Cu) are inserted into the primary beam projection, depending on the organ program selected. They can also be selected manually. <p>Option: A measuring chamber for the dose area product can be integrated into the multileaf collimator.</p> <p>Controls and displays The control elements at the tube assembly and the multileaf collimator are ergonomically arranged for single-handed operation.</p> <p>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:</p> <ul style="list-style-type: none"> - The collimation size of the acquisition field (in cm x cm). - The selected SID. - The selected Cu additional filters.

Part No. / Product	Description
<p>(Continued) 14428644 Lum. Agile w/ Ysio Opt. f. wi-D</p>	<ul style="list-style-type: none"> - Rotation from the 0-position. - Tube assembly and detector centering. - Operating states such as "ACSS/Manual", "Ready", "Selected", etc. <p>The display follows the tube assembly orientation.</p> <p>The following functions can be set manually at the multileaf collimator:</p> <ul style="list-style-type: none"> - Full field light localizer with timer for optical display of the collimated acquisition format and an optionally coverable laser line light localizer. - 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. <p>19" Flat display High-contrast b/w TFT flat-screen display for live image display in the control room. With blue background color and black frame.</p> <ul style="list-style-type: none"> - Flicker-free and distortion-free image display. - Screen size: 19" (48 cm). - Resolution: 1280 x 1024 (pixels). - Typical brightness: 400 cd/m². - Maximum brightness: 1000 cd/m². - Ambient light sensor for optimum adaptation of the image display to the room brightness. <p>Imaging system High-resolution digital imaging system with innovative image display, DICOM network connection and syngo-like user interface. It was optimized for general fluoro and multi-functional workplaces.</p> <p>With the FLUOROSPOT Compact both single acquisitions and series from 0.5 to 8 images per second in 1440² matrix can be made and reviewed dynamically. The digital acquisition process produces continuously high-quality images for all fluoroscopy-guided contrast medium examinations, skeletal acquisitions and interventional procedures.</p> <p>Operating modes:</p> <ul style="list-style-type: none"> - Digital radiography (DR) with up to 2,880²/12-bit matrix. - CAREvision: Pulsed fluoroscopy with selectable pulse frequencies 3 f/s, 7.5 f/s, 10 f/s, or 15 f/s in 1024²/12-bit matrix. - High-speed fluoro at 30 f/s in Zoom 2 (22 cm x 22 cm) Pulsed fluoroscopy is especially suitable for time-intensive examinations to reduce the radiation dose for physician, staff, and patient. - Display and storage of the last fluoroscopic image after switching off radiation (Last Image Hold). - Single image and serial mode up to 1,440²/12-bit or 1,024²/12-bit matrix (depending on zoom). - Serial mode (max. 8 f/s) with variable frame rate in three steps (max. 1,440²/12-bit matrix). - DDO (Dynamic Density Optimization) for on-line harmonization of native series and single images. - Live auto-windowing during fluoroscopy - Live auto-shutter during fluoroscopy <p>Image processing:</p> <ul style="list-style-type: none"> - Real-time edge enhancement, positive/negative image display, windowing, contrast/brightness, electronic display (shutter), image shift (roaming), vertical and horizontal image inversion, magnifying glass and zoom functions. - DiamondView Plus: multi-scaling procedure for image post-processing with high detail contrast and reduced noise. Filter size and strength are weighted differently and are used for adaptation to the overall image

Part No. / Product	Description
<p>(Continued) 14428644 Lum. Agile w/ Ysio Opt. f. wi-D</p>	<p>content. DiamondView Plus enhances the signal exploitation of the dynamic range and improves the organ-specific detail contrast (soft tissue and bone). Can be preset in the organ program, and can subsequently be selected or deselected.</p> <ul style="list-style-type: none"> - Storing of single images as reference images also during fluoroscopy. - Quantification: angle/length measurement, automatic and/or manual calibration. - Text functions: User-defined image annotation, free annotation or using text components, comment line for the image, R/L display, image report and image quality graphics. - Image gallery for harmonization (visualization support for image post-processing) <p>Image display: Image review and display in 100 Hz progressive display (1,024² matrix) through high-resolution, flicker-free flat-screen displays.</p> <ul style="list-style-type: none"> - Screen layout with 4, 9, 16, 25, or 36 images of an examination. - Display of R/L marks. <p>Image storage capacity: 50,000 images for permanent storage in 1k/12-bit matrix and 2,000 images for permanent storage in 2840 x 2880 matrix.</p> <p>DVD / CD burner (DICOM) DVD drive for automatic digital image storage on CD/DVD for offline data exchange in DICOM, TIFF, and AVI format.</p> <p>Connectivity</p> <ul style="list-style-type: none"> - DICOM Send: Digital, unidirectional image transfer of single images or complete folders to a network in DICOM format. - DICOM Print: Provision of DICOM Print service for connection to a laser camera or a network printer (postscript-capable). - DICOM Storage Commitment (StC): The network/archive sends a receipt acknowledgment for images/folders to the image system in DICOM format. <p>Note concerning DICOM interface(s) 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 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.</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>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.</p> <p>Siemens Remote Service System Management software package to support Siemens Remote Service (SRS) with the following functions:</p> <ul style="list-style-type: none"> - Basic package Siemens Remote Service for Diagnostics and Repair, Quality Assurance and Software Maintenance. - System remote configuration, e.g. adding of a DICOM node. - Early warning system to secure system operation.

Part No. / Product	Description
<p>(Continued) 14428644 Lum. Agile w/ Ysio Opt. f. wi-D</p>	<ul style="list-style-type: none"> - The functions are made available in accordance with the maintenance contract package. <p>Prerequisite for the early warning system is a permanent connection to the system via LAN and router. It is the project manager's task to make this available on-site.</p> <p>Power connection for the entire X-ray system Basic version: 3/N/PE ~400 V (±10%) for 50/60 Hz line frequency. Option: 3/N/PE ~440/480 V (±10%) at 50/60 Hz via line adaptation transformer.</p> <p>Customer Care. Life - the customer care solution by Siemens Healthcare From the moment you purchase your Siemens system you will benefit from many services that are offered by Customer Care. Life* offers, e.g.:</p> <ul style="list-style-type: none"> - initial application training, - interactive e-learning for various applications, - free customer magazines, - arrangements for clinical training via a global network, - and free trial licenses <p>You will find detailed information on our e-learning program and further details on general Customer Care. Life services on the internet.</p> <p>* Not all services of the Customer Care. Life offerings are necessarily available for all systems.</p> <p>Components for basic configuration are described in the following.</p>
<p>14417239 wi-D (wireless detector)</p>	<p>Mobile, wireless flat detector (wi-D) for image acquisition, 3543pR, CsI scintillator, amorphous silicon (a-Si).</p> <ul style="list-style-type: none"> - Detector-active acquisition matrix ca. 3.000 x 2.364 (7 million pixels). - Detector-physical acquisition matrix ca. 3.000 x 2.400 (7,2 million pixels). - Pixel size 144 µm - Acquisition depth (gray scales) 16 bit. - Acquisition formats up to 34.0 cm x 43.2 cm (13.4" x 17"). - Data transmission via W-LAN or backup cable. - Wireless use for approx. 2 hours. - Detector weight 4.8 kg - Max. load 135 kg (patient lying down) and 100 kg (patient standing). <p>Loading and receiving unit for the wireless detector connected to PACS via the imaging system.</p>
<p>14417363 Upgrade to 80 kW PLF</p>	<p>Increased performance to extend the range of application:</p> <ul style="list-style-type: none"> - 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
<p>04434028 DICOM WORKLIST & MPPS</p>	<p>DICOM MWL (Modality Worklist): Import of patient/examination data from an external RIS/HIS patient management system.</p> <p>DICOM MPPS (Modality Performed Procedure Step): Sending of dose data, patient data, and examination data to an external RIS/HIS patient management system.</p> <p>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).</p> <p>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.</p>

Part No. / Product	Description
<p><i>(Continued)</i> 04434028 DICOM WORKLIST & MPPS</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>14428635 Trolley with 1 Display, b/w</p>	<p>Mobile display trolley with one tiltable 19" high-contrast b/w display for live image display in the examination room.</p> <p>Monochrome TFT technology with high luminance and extended viewing angle.</p> <ul style="list-style-type: none"> - Screen size 19" (48 cm). - Resolution: 1280 x 1024 (pixels). - Maximum brightness (typ.): 1000 cd/m². - Flicker-free and distortion-free image display. - Ambient light sensor for optimum adaptation of the image display to the room brightness.
<p>14428628 Fully synch. ceiling-mtd. stand, 3m</p>	<p>Tube assembly support with X-ray tube assembly and motorized collimator.</p> <p>All projection-relevant tube assembly positions can be adjusted with handles symmetrically mounted to the tube assembly collimator unit.</p> <p>The ceiling-mounted tube assembly support can be adjusted in 3 axes for longitudinal, transverse, and height adjustment (x, y, and z-axes).</p> <ul style="list-style-type: none"> - Horizontal travel range in longitudinal direction 346 cm. - Horizontal travel range in transverse direction 220 cm. - Vertical lift 180 cm. <p>In 2 further axes (α- and β-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/cassette, or for free bedside acquisitions.</p> <ul style="list-style-type: none"> - Rotation around the vertical axis of the ceiling-mounted support from +154° to -182°. Lock-in positions every 90°. - Rotation around the horizontal axis of the tube assembly support arm $\pm 140^\circ$. Lock-in positions at 0° and $\pm 90^\circ$. <p>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.</p> <ul style="list-style-type: none"> - 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°. - Heat storage capacity of the anode 580 kJ (783 kWh) acc. to IEC 613. - Total filtration (IEC 601-1-3) ≥ 2.5 mm Al equiv. <p>Multileaf collimator: With full field and laser line light localizer. Rectangular collimation, manual and motorized, via organ programs.</p> <ul style="list-style-type: none"> - 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 filters (0.1Cu; 0.2 CU and 0.3 Cu) are inserted into the primary beam projection, depending on the organ program selected. They can also be selected manually.

Part No. / Product	Description
<p><i>(Continued)</i> 14428628 Fully synch. ceiling-mtd. stand, 3m</p>	<p>Option: A measuring chamber for the dose area product can be integrated into the multileaf collimator.</p>
<p>14411247 Bucky Wall Unit for wi-D left</p>	<p>System Configuration The Bucky wall stand is a floor-mounted, stand-alone, or wall-mountable grid acquisition system with a height-adjustable detector Bucky with Bucky support for the accommodation of a mobile, wireless flat detector 3543pR as digital image acquisition system or for similar acquisitions using CR cassette.</p> <p>It is especially suited for acquisitions of skeletal radiography of the standing and seated patient:</p> <ul style="list-style-type: none"> - Orthopedic diagnostics. - Thorax and general diagnostics. - Trauma and ER diagnostics. <p>With this Bucky wall stand, more profound diagnostic requirements for acquisitions of thorax (lungs), abdomen, pelvis, spine, skull and extremities are met.</p> <p>The basic configuration consists of a radiography system with a vertically positioned detector Bucky for horizontal, oblique, or lateral patient acquisitions. The additional tilting range* of the detector Bucky extends the diagnostically relevant acquisition projections.</p> <ul style="list-style-type: none"> - Vertical height adjustment of the counter-balanced, easily movable detector Bucky from detector center approx. 26 cm to 173 cm above floor: - Tilting range between 0° and +90°, and up to -20° continuously around the horizontal axis; lock-in position at 0°. - In combination with a ceiling-mounted support, tracking between it and Bucky wall stand. <p>Detector Bucky The detector Bucky with single-handed operation includes a IONTOMAT three-field chamber for automatic exposure control (incl. three-field templates) and a device for symmetric positioning of the flat detector.</p> <ul style="list-style-type: none"> - Front plate - detector distance ≤37 mm. - Radiation absorption of the front plate ≤0.55 mm Al. - A stationary, exchangeable transparent grid for scattered radiation reduction; Pb 15/80. Optionally for SID 115 cm and/or 150 cm and/or 180 cm (see tender further down). <p>Removable grid: The grid can easily be removed, saving the user time in examinations not requiring a grid. For example in pediatrics, where dose reduction is especially important.</p> <p>Auto tracking</p> <ul style="list-style-type: none"> - With ceiling-suspended X-ray tube: Auto tracking of X-ray tube and detector in wall stand during height adjustments at wall stand are possible with detector tray in 0° and position 90°. - With system X-ray tube: Auto tracking of X-ray tube and detector in wall stand during height adjustments at wall stand are possible with detector tray in 0° position. <p>Accessories Scope of delivery:</p> <ul style="list-style-type: none"> - Lateral patient handles for optimum patient positioning, e.g. during PA thorax exposures. - Patient overhead handle, swiveling around the horizontal axis, for optimal patient positioning for lateral acquisitions. <p>*) Only in conjunction with ceiling-mounted support; no tilting when combined with basic X-ray tube.</p>
<p>CID4948 Portable DR Panel Protector</p>	<p>The unique design of the DR Panel Protector provides an easy way to take weight-bearing x-rays of feet (AP view). The unit is simply placed over the DR panel which is first positioned on the floor. Patients step onto the DR Panel Protector with as much weight as needed to get the desired image. The face plate is made of polycarbonate</p>

Part No. / Product	Description
<p><i>(Continued)</i> CID4948 Portable DR Panel Protector</p>	<p>designed to support patients weighing up to 500 pounds. The face plate is x-ray lucent, allowing the x-rays to pass through the DR Panel Protector with no significant absorption or scattering. The non-slip rubber floor grips keep the DR Panel Protector from slipping on a hard floor. The Panel Protector frame is notched to accommodate the cable connection from the digital DR panel to the host system. One year warranty through Clear Image Devices.</p>
<p>04453846 CAREPROFILE - C (Optional)</p>	<p>Radiation-free positioning of primary collimators in the LIH on the monitor. Especially suitable for dose-saving examinations.</p>

LUMINOS AGILE SYSTEM

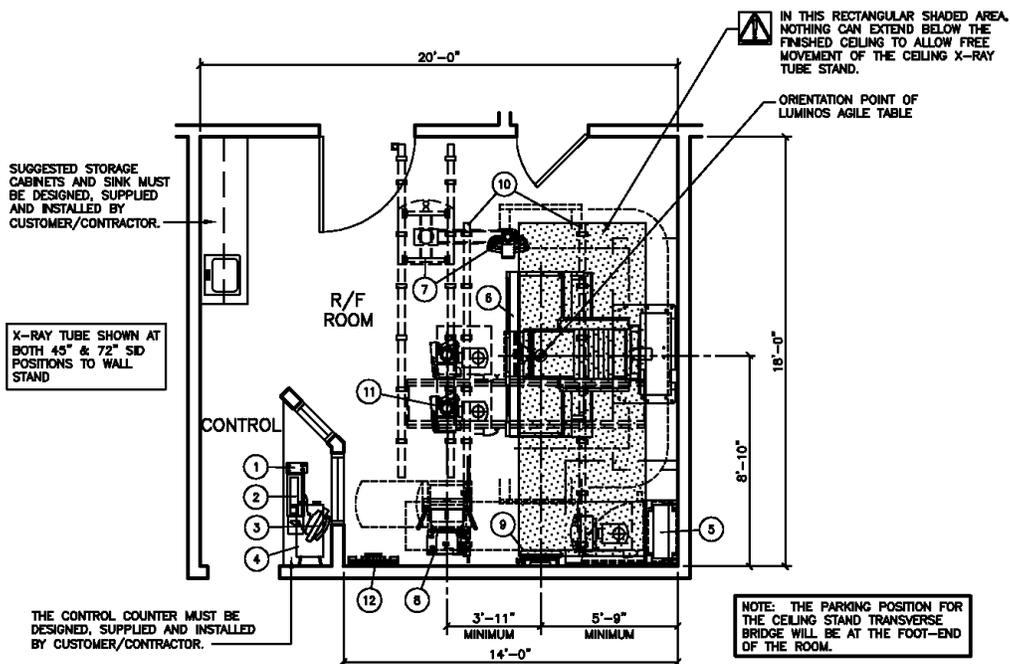
TYPICAL ROOM PLAN



The intended use for this Cut Sheet is to communicate the spatial requirements as well as the basic architectural, electrical, structural, and mechanical requirements for this piece of imaging equipment. The information provided in this document is for reference only, during the pre-planning stage, and therefore does not contain any site specific detailed requirements. This information is subject to change without notice. Federal, state and/or local requirements may impact the final placement of the components. It is the customer's responsibility to ensure that the final layout and placement of the equipment complies with all applicable requirements.

LUMINOS AGILE SYSTEM

TYPICAL ROOM PLAN



TYPICAL PLAN

SCALE: 1/8" = 1'-0"

EQUIPMENT LEGEND

NO	DESCRIPTION	SMS SYM	WEIGHT (LBS)	BTU/HR TO AIR	DIMENSIONS (INCHES)			REMARKS
					W	D	H	
①	CONTROL ROOM MODULE	ⓧ	2	-	4 3/4	10 1/16	3 3/16	ON CUSTOMER'S COUNTER
②	IMAGING SYSTEM - KEYBOARD AND MOUSE	⊖	-	-	-	-	-	ON CUSTOMER'S COUNTER
③	B/W FLAT SCREEN CONTROL ROOM MONITOR	⊖	-	-	-	-	-	ON CUSTOMER'S COUNTER
④	IMAGING SYSTEM (UNDER COUNTER)	Ⓢ	110	1,468	17 3/8*	32 1/2*	27*	*INCLUDES 5 1/8" BEHIND, 4" ABOVE AND ALONG CONTAINER.
⑤	POLYDOROS F80 (80 KW) GENERATOR CABINET	Ⓟ	838	2,048**	31 1/2	17 1/8	86 3/4	**DURING OPERATION, 1,195 IN STANDBY MODE
⑥	LUMINOS AGILE (+90/-90) TABLE	Ⓟ	3,793	512	83	88	77	DIMENSIONS GIVEN FOR TABLE IN 0° POSITION
⑦	DCS-1 IC-DVI FLAT DISPLAY & TOUCH DISPLAY ON CEILING SUSPENSION	Ⓧ	419	512	167 1/8	27 7/8	***	***63" MIN. AND 102" MAX.
⑧	YSIO WALL STAND WITH MOBILE DETECTOR (RIGHT LOADING)	Ⓢ	551	819	30	37*A	83	*A - MAX. IN HORIZONTAL POSITION
⑨	DOCKING STATION (WALL MOUNTED)	Ⓢ	40	256	20 3/8	7 13/16	16 1/4	WITHIN 11.5 FT. OF WALL STAND
⑩	CEILING RAILS FOR FULLY SYNCHRONIZED TUBE STAND	⊖	59	-	167 3/8	3	3 1/2	SIZE AND WEIGHT PER RAIL
⑪	3M TRANSVERSE BRIDGE AND X-RAY TUBE STAND	Ⓢ	772	853	119 1/4	39	4	
⑫	GRID HOLDER (WALL MOUNTED)	⊖	22	-	25 1/16	6 7/16	21 11/16	SUGGESTED LOCATION

LUMINOS AGILE SYSTEM SPECIFICATIONS

POLYDOROS F80	
X-RAY GENERATOR POWER REQUIREMENTS	
INCOMING POWER:	480 VOLTS, 3 PHASE, 60Hz
CIRCUIT BREAKER:	80 AMPS.
GENERATOR OUTPUT:	80 KW
ALLOWABLE IMPEDANCE:	0.16 OHMS.
MAXIMUM MOMENTARY LOAD:	135 KVA
LINE VOLTAGE VARIATION:	± 10% MAX.
PHASE BALANCE:	2% MAX BETWEEN ANY 2 PHASES
FREQUENCY VARIATION:	± 1 Hz
VOLTAGE SURGES:	10% MAX. ABOVE LINE VOLTAGE
INSTANTANEOUS VARIATION:	20 msec. MAX. DURATION
VOLTAGE SAGS:	10% MAX. BELOW LINE VOLTAGE
	20 msec. MAX. DURATION
LINE TRANSIENTS (SPIKES):	50% MAX. ABOVE LINE VOLTAGE
	5 msec. MAX. DURATION
GROUND IMPEDANCE:	0.25 OHMS MAX.
NOTE:	
ALL INCOMING POWER SUPPLIES, FOR THE SIEMENS EQUIPMENT, ARE TO BE DEDICATED (BACK TO SOURCE) ISOLATED AND INSULATED FROM ANY OTHER EQUIPMENT, SUCH AS, ELEVATORS, GENERATORS, HVAC SYSTEMS, ETC.	
A NEUTRAL CONDUCTOR, IF PRESENT, IS NOT USED FOR THE LINE VOLTAGE CONNECTION TO THE SIEMENS EQUIPMENT. IF THE NEUTRAL CONDUCTOR IS PROVIDED, IT SHOULD NOT BE ELECTRICALLY CONNECTED AT ANY POINT IN THE POWER DISTRIBUTION TO THE SIEMENS EQUIPMENT UNLESS SPECIFICALLY REQUIRED. UNINTENTIONAL NEUTRAL TO GROUND BONDS MAY VIOLATE LOCAL AND NATIONAL ELECTRICAL CODES, AS WELL AS CREATE GROUNDING PROBLEMS.	
ATTENTION:	
SIEMENS MEDICAL SYSTEMS, INC. RECOMMENDS THAT THE INCOMING POWER LINES BE ANALYZED WITH RESPECT TO TRANSIENT SURGES AND IMPULSES, SAGS, AND OVERVOLTAGES.	

TABLE TECHNICAL DATA	
ENVIRONMENT:	59°F – 95°F OPERATING ROOM TEMPERATURE (NOTE: MAXIMUM 82°F WITH WIRELESS DETECTOR) 20% – 75% PERMISSIBLE RELATIVE AIR HUMIDITY (NON-CONDENSING)
TRANSPORTING/ RIGGING:	UNIT BASE WEIGHT: 1,901 LBS. WITH PACKING 1,610 LBS. WITHOUT PACKING (WITH TRANSPORT CARRIAGE) DIMENSIONS WITH PACKING: 53"L X 36"W X 67"H UNIT SUPPORT WEIGHT: 2,095 LBS. WITH PACKING 1,517 LBS. WITHOUT PACKING (WITH TRANSPORT CARRIAGE) DIMENSIONS WITH PACKING: 97"L X 52"W X 56"H DIMENSIONS WITHOUT PACKING (WITH TRANSPORT CARRIAGE): 116"L X 32"W X 60"H (WHEELS OUTSIDE) 95"L X 32"W X 60"H (ALL WHEELS INSIDE) 107"L X 32"W X 60"H (TWO WHEELS INSIDE) MINIMUM DOOR OPENING FOR TRANSPORT CARRIAGE: 34"W WITH MINIMUM 8'-3" CORRIDOR WIDTH 48"W WITH MINIMUM 6'-1" CORRIDOR WIDTH

CEILING STAND TECHNICAL DATA		
TRANSPORTING INFORMATION		
CEILING TRANSVERSE BRIDGE (3M)	SIZE: 126"L x 32"W x 10"H	WEIGHT: 419 LBS.
CEILING TRANSVERSE BRIDGE (4M)	SIZE: 174"L x 32"W x 10"H	WEIGHT: 512 LBS.
X-RAY TUBE SUPPORT FULLY SYNCHRONIZED (WITHOUT CARRIAGE)	SIZE: 67"L x 41"W x 52"H	WEIGHT: 827 LBS.
MOBILE DETECTOR WALL STAND (WITH PACKING AND CRATE TOP)	SIZE: 92"L x 35"W x 42"H	WEIGHT: 898 LBS.
MINIMUM DOOR OPENING:	37"	
MINIMUM CORRIDOR WIDTH:	6'-11"	
ENVIRONMENTAL CONDITIONS		
	IN OPERATION	TRANSPORT
PERMISSIBLE AMBIENT TEMPERATURE	59°F TO 82°F	-4°F TO 131°F
PERMISSIBLE RELATIVE HUMIDITY	20 TO 75%	10 TO 95%

WIRELESS DETECTOR CONNECTION
OPERATION OF THE WIRELESS DETECTOR CAN BE AFFECTED BY OTHER WLAN DEVICES IN THE VICINITY OF THIS INSTALLATION. TO AVOID ANY CONFLICTS, THE CUSTOMER MUST PROVIDE A LIST OF EXISTING WLAN CHANNELS (FREQUENCIES) OR THE SPECIFIC CHANNEL (FREQUENCY) THEY DESIRE TO BE USED FOR THE WIRELESS DETECTOR.
THE WIRELESS CONNECTION IS ENCRYPTED (WPA2) AND IS BASED ON TWO WLAN STANDARDS, WITHIN WHICH SEVERAL CHANNELS (FREQUENCIES) ARE AVAILABLE: 1) 11G STANDARD – OPERATES AT 2.5 GHZ 2) 11A STANDARD – OPERATES AT 5 AND 6 GHZ
THE STANDARD (11G OR 11A) CAN BE SET BY SIEMENS SERVICE VIA THE SERVICE SOFTWARE INSTALLED ON THE IMAGING SYSTEM.
THE WIRELESS CONNECTION IS ONLY USED TO TRANSFER DATA BETWEEN SIEMENS EQUIPMENT AND IS NOT USED TO SEND DATA TO THE CUSTOMER'S NETWORK.

LUMINOS AGILE SYSTEM SPECIFICATIONS

MAXIMUM CABLE DISTANCES BETWEEN COMPONENTS								
	CONTROL ROOM MODULE/EQUIP.	IMAGING SYSTEM	GENERATOR	LUMINOS AGILE TABLE	CEILING MONITOR SUSPENSION	CEILING TUBE STAND	DETECTOR WALL STAND	DOCKING STATION
GENERATOR	59'-0"	59'-0"	-	22'-0"	-	32'-0"	36'-0"	36'-0"
IMAGING SYSTEM	11'-0"	-	59'-0"	-	59'-0"	-	-	-
LUMINOS AGILE TABLE	-	-	22'-0"	-	-	-	-	-

THE DISTANCES LISTED ABOVE ARE CALCULATED AS THE MAXIMUM CABLE LENGTH BETWEEN CABLE ENTRY POINTS. DEPENDING ON THE COMPONENT, THE CABLE ENTRY POINT MAY BE IN FLOOR, WALL OR CEILING. VARIOUS ARRANGEMENTS OF COMPONENTS ARE POSSIBLE AS LONG AS THE DISTANCES SHOWN ARE MAINTAINED AND THE SYSTEM FUNCTIONALITY IS NOT ADVERSELY AFFECTED.

ROOM HEIGHT REQUIREMENTS		
ROOM HEIGHT WITHOUT CEILING STAND		
MINIMUM ROOM HEIGHT	RESTRICTION WITH +/-90° ROTATION	
8'-2 1/2" TO LESS THAN 10'-4"	- MAXIMUM TABLETOP EXTENSION OF 11 1/2" WITH A ROOM HEIGHT OF 8'-2 1/2" - DIGITAL IMAGING TOWER CANNOT BE IN THE EXTREME HEAD-END POSITION WITH A ROOM HEIGHT OF 8'-2 1/2" - RESTRICTIONS IN THE MOVEMENT RANGE WITH AUTOMATIC CORRECTION OF MOVEMENT.	
10'-4" OR GREATER	NO RESTRICTIONS	
ROOM HEIGHT WITH CEILING STAND		
	USABLE TABLE HEIGHT AT 45° SID (3)	
MINIMUM ROOM HEIGHT	8'-9 1/8"	2'-6"
MINIMUM ROOM HEIGHT FOR 60° SID TO TABLE (3)	9'-7" (1)	3'-4"
MAXIMUM ROOM HEIGHT WITHOUT THE TUBE STAND TELESCOPE EXTENSION	9'-5 5/8" (1)	3'-2"
	9'-10 7/8" (2)	3'-7 3/8"
MAXIMUM ROOM HEIGHT WITH THE TUBE STAND TELESCOPE EXTENSION	10'-1 1/2" (1)	3'-2"
	10'-7" (2)	3'-7 3/8"
1) UPRIGHT (0°) EXPOSURES ARE POSSIBLE AT LOWEST POSITION OF WALL STAND. 2) UPRIGHT (0°) EXPOSURES ARE NOT POSSIBLE AT LOWEST POSITION OF WALL STAND. 3) WITH SECOND PLANE OF CEILING STAND.		

REMOTE SYSTEM DIAGNOSTICS
SIEMENS REMOTE SERVICES (SRS) REQUIRES A CONNECTION BETWEEN THE SRS REMOTE SERVER AND SIEMENS SYSTEMS VIA REMOTE LOCAL AREA NETWORK ACCESS, TO ENSURE THE UPTIME OF YOUR SYSTEM.
THIS SERVICE REQUIRES ONE OF THE FOLLOWING CONNECTION METHODS:
1. (PREFERRED) VPN - WHERE THE CUSTOMER HAS AVAILABLE A VPN CAPABLE FIREWALL OR OTHER VPN APPLIANCE.
2. (OPTIONAL) *SRS ROUTER* - CONNECTED TO ANALOG PHONE LINE VIA *ANALOG MODEM*, ETHERNET CONNECTION TO CUSTOMER'S LAN, AND A POWER OUTLET.
NOTE: = *SUPPLIED BY SIEMENS*

RESOURCE LIST (SMS USE ONLY)		
DESIGNATION	PG NUMBER	DATE
LUMINOS AGILE	XPD1-320.891.01.02.02	07.11

FOR MORE INFORMATION
FOR MORE DETAILED PLANNING REQUIREMENTS FOR THIS SYSTEM, SEE THE TYPICAL FINAL DRAWING SET NUMBER: 11028