PROVIDENCE HOSPITAL | ASCENSION

RECEIVED
Jul 06 2018
STATE HEALTH PLANNING AND DEVELOPMENT AGENCY

Filed electronically at shpda.online@shpda.alabama.gov

July 5, 2018

Alva M. Lambert
Executive Director
State Health Planning and Development Agency
100 North Union Street, Suite 870
Montgomery, AL 36104

RE: Request for Determination of Exemption Status
Providence Hospital, Mobile, Alabama
Cardiac Catheterization Lab Equipment

Dear Mr. Lambert,

Enclosed, please find a Request for Determination of Exemption Status for cardiac catheterization equipment to be replaced at Providence Hospital in Mobile. The request includes the replacement of equipment used to perform radiologic imaging for cardiac catheterization procedures.

The equipment cost is $1,648,000 and the hospital will spend approximately $2,010,000 for renovation and installation, which is below the threshold requiring a Certificate of Need. The hospital respectfully requests approval for this equipment replacement.

The filing fee in the amount of $3,296 has been submitted via the SHPDA electronic payment portal.

If you have any questions or need further information about this request, please contact me via phone at (205) 930-2113 or via email at Brenna.Powell@ascension.org.

Sincerely,

Brenna M. Powell

Brenna M. Powell
Chief Strategy Officer
Ascension, St. Vincent's Health System
and Providence Hospital

RECEIVED
Jul 06 2018
STATE HEALTH PLANNING AND DEVELOPMENT AGENCY

State Health Planning and Development Agency

Mailing address: Post Office Box 303025, Montgomery, Alabama 36130-3025
Street address: 100 North Union Street, Suite 870, Montgomery, Alabama 36104

Request # _____
Date Rec. _____
Received by: _____

REQUEST FOR DETERMINATION OF EXEMPTION STATUS FOR REPLACEMENT OF EXISTING EQUIPMENT

A filing fee in the amount of $ 3,296 has been submitted with this application.

REQUESTER IDENTIFICATION (Check One) HOSPITAL (✓) NURSING HOME (___)
OTHER (___) (Specify) _____

A. Providence Hospital
Name of requester

6801 Airport Blvd.	Mobile	Mobile
Address	City	County

Alabama	36608	251-266-1000
State	Zip	Phone

B. _____
Name of Facility/Organization (if different from A)

Address	City	County

State	Zip	Phone

C. _____
Name of Legal Owner (if different from A or B)

Address	City	County

State	Zip	Phone

D. Brenna M. Powell
Name and Title of Person Representing Proposal and With Whom SHPDA Should Communicate

810 St. Vincent's Drive	Birmingham	Jefferson
Address	City	County

Alabama	35205	205-930-2113
State	Zip	Phone

DESCRIPTION OF EQUIPMENT TO BE REPLACED DESCRIPTION OF PROPOSED NEW EQUIPMENT

A. Manufacturer: ***Philips Medical Systems***

Serial #: ***P25-1160***

B. Model: ***Integris H3000***

C. Name of equipment: ***Radiologic/Flouroscopy Cardiovascular System***

D. Fair market value of equipment at present: ***No trade-in value***

E. Cost of equipment (include written price quote): ***$1,648,000***

F. Describe use of current equipment:

The existing radiologic/fluoroscopic system is used to perform radiologic imaging for cardiac cath lab procedures.

Describe use of proposed equipment:

The new equipment will be used to perform radiologic imaging for cardiac catheterization lab procedures.

G. List any attachments or additional procedures associated with this equipment that could not be performed by old equipment:

None

H. Can any procedures be performed with the proposed new equipment that cannot be performed with the replaced equipment? If yes, describe in detail:

No

I. Location of existing equipment (include room #):

Providence Hospital, 6801 Airport Boulevard Mobile, Alabama
3rd Floor of the hospital

J. List specially trained or qualified personnel necessary for operation of equipment:

Board Certified Cardiologist, Registered Nurse, Radiology Technologist

K. What use will be made of old equipment when replaced?
(Trade in on new equipment, used as back up, save for parts, etc.)

Equipment will be removed for disposal

L. List job titles of any additional personnel that will be required to operate the new equipment.

None

M. Describe any renovation or new construction that will be necessary for the installation of the replacement equipment and cost.

Renovation of pre-procedure space and renovation of the room that will house the equipment is planned in the amount of $2,010,000

N. Describe any new annual operating cost associated with this project such as maintenance contracts, salaries of new employees hired due to equipment, etc.

None

III. COST

A. Equipment costs (Costs have to be supported by price quote on manufacturer's stationery or letterhead.) Cost of equipment only; do not list lease cost. $ 1,648,000

B. Less trade-in of old equipment $ n/a

C. Total cost of equipment $ 1,648,000

Calculation of fee for this determination:
Multiply dollar amount in III.C. (total cost of equipment) times 1% (the application fee for a Certificate of Need); 20% of this amount is the application fee for non-rural hospitals.
For rural hospitals, the application fee is 25% of the application fee as calculated above for non-rural hospitals.
NOTE: Fee submitted represents 10 percent of the maximum CON fee

Include manufacturer's literature on old equipment, if available, and on the new equipment.

Include any other information pertinent to the determination.

The Executive Director may request any other information which is relevant to his decision.

IV. CERTIFICATION

I certify that the information provided herein is true and correct and that there is no additional information which would be pertinent to this application which has not been provided. Further, I understand that any misrepresentation on this application or failure to include relevant information may void any favorable determination secured by such misrepresentation or omission.

Brenna M. Powell
Signature of Applicant

Brenna M. Powell, Chief Strategy Officer
Applicant's Name and Title
(Type or Print)

Sworn to and subscribed before me this
2nd day of July, 20 18

Deborah A. Wiggs
Notary Public (affix seal on original)

DEBORAH A WIGGS
MY COMMISSION EXPIRES
MAY 3, 2022
NOTARY PUBLIC
STATE OF ALABAMA

Siemens Medical Solutions USA, Inc.
40 Liberty Boulevard, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Lori Stapp - (334) 546-7050

Customer Number: 0000009215

Date: 3/21/2018

PROVIDENCE HOSPITAL
6801 AIRPORT BLVD.
MOBILE, AL 36685

Siemens Medical Solutions USA, Inc. is pleased to submit the following quotation for the products and services described herein at the stated prices and terms, subject to your acceptance of the terms and conditions on the face and back hereof, and on any attachment hereto.

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Contract Total: $1,648,000
(total does not include any Optional or Alternate components which may be selected)

Proposal valid until 5/30/2018

Notes for Quote Nr 1-LUUJSO:
Estimated Delivery Date: 12/1/2018

Estimated delivery date is subject to change based upon factory lead times, acceptance date of this quote, customer site readiness, and other factors. A Siemens representative will contact you regarding the final delivery date.

This offer is only valid if firm, non-contingent orders for the following quotes are simultaneously placed with Siemens:
1-LUUJSO
1-MDIUHZ

Notes for Quote Nr 1-MDIUHZ:
Estimated Delivery Date: 12/1/2018

Estimated delivery date is subject to change based upon factory lead times, acceptance date of this quote, customer site readiness, and other factors. A Siemens representative will contact you regarding the final delivery date.

This offer is only valid if firm, non-contingent orders for the following quotes are simultaneously placed with Siemens:
1-LUUJSO
1-MDIUHZ

Siemens Medical Solutions USA, Inc.
40 Liberty Boulevard, Malvern, PA 19355
Fax: (866) 309-6967

SIEMENS REPRESENTATIVE
Lori Stapp - (334) 546-7050

Accepted and Agreed to by:

Siemens Medical Solutions USA, Inc.		**PROVIDENCE HOSPITAL**	
By (sign):		By (sign):	
Name:	Lori Stapp	Name:	
Title:	Account Executive	Title:	
Date:		Date:	

By signing below, signor certifies that no modifications or additions have been made to the Quotation. Any such modifications or additions will be void.

By (sign): _____

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Quote Nr:	**1-LUUJSO Rev. 2**
Terms of Payment:	10% Down, 80% Delivery, 10% Installation
	Free On Board: Shipping Point
Purchasing Agreement:	Not Applicable

ARTIS pheno

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

Qty	Part No.	Item Description
1	14455534	**ARTIS pheno - Surgery** Engineered to be truly patient-oriented, ARTIS pheno(r) is a unique floormounted robotic C-arm system for individualized preprocedural planning, intraoperative guidance, and immediate checkup - regardless of patient condition or procedure complexity. Furthermore, it also helps you maintain a sterile work environment. Faster 3D imaging for patients with impaired kidney function. Fast readout of up to > 90fps for option syngo DynaCT. The unique robotic design allows the positioning of the C-arm in virtually any patient position thanks to the flexible isocenter. Simplified operation of ARTIS pheno with Touch2Move technology (functions that can be selected and invoked in a single step). The wide-space C-arm's usable clearance of 95.5 cm (37.5") grants more freedom during preparation and the procedure itself. CleanSurface: ARTIS pheno is sporting smooth surfaces; the seamless sealed covers protect against spills and simplify cleaning. A layer of antimicrobial paint stops bacteria in growing or staying for longer on the surface. CleanGuide, a comprehensive cleaning concept for ARTIS pheno. CleanGuide contains recommendations for detergents and suggests cleaning methods and techniques that ensure validated results. Images will be shown on a large display Disclaimer: The products/features (here mentioned) are not commercially available in all countries. Due to regulatory reasons their future availability cannot be guaranteed. Please contact your local Siemens organization for further details.
1	14455541	**Performance package** The new zen40HDR detector offers unmatched performance and ultra-low-dose imaging. Live 2k imaging during both fluoro and acquisition shows even the smallest details. More than 90 frames per second during 3D acquisition means shorter scan times with fewer motion artefacts. Live 2k imaging at 15fps during fluoro and acquisition Frame rates of 90 fps or more during 3D acquisition Improved DQE thanks to unique scintillator thickness of 1,000 µm The GIGALIX X-ray tube concentrates high pulse power on small, square-shaped focal spots (flat emitter technology for all focal spots). This provides unprecedented image quality for confidence in challenging situations. StructureScout for optimized visibility at lowest dose.

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Qty	Part No.	Item Description
1	14455542	**Laser crosshairs** Laser cross for zen40HDR detector, integrated into the detector housing for simplified patient positioning and for syngo Needle Guidance marking preplanned puncture point and angle.
1	14455538	**ARTIS multi-tilt table** The multi-tilt table ensures optimal patient positioning regardless of the procedure and patient size. With an unprecedented level of material integrity, it is suitable for even the heaviest of patients. - Maximum table load: 440 kg (970 lbs) consisting of 280 kg (617 lbs) for the patient, 100 kg (220 lbs) for accessories, plus 60 kg (132 lbs) for CPR - Allows tilting in +15°/-20° and a +/-15° cradle - Easy movement of tabletop regardless of table load, lower-body radiation protection, and tableside modules - Small table base allows upright and comfortable standing, close to the patient The easy-float tabletop permits hassle-free positioning of the patient. Virtually zero force is required to achieve the desired table position - regardless of table load, patient weight and size. Positioning remains strikingly easy even when the table is tilted. - New drive concept powers free-floating table top - Move loaded table - even in Trendelenburg and cradle positions - with minimal force - Free movement independent of table load, patient weight, and patient size.
1	14432939	**2nd 4 pedal wireless footswitch** Additional 4-pedal footswitch for release of fluoroscopy, exposure, and table brake, as well as a configurable additional function. Wireless connection via radio communication.
1	14432948	**Automap** Automatic stand positioning depending on the selected reference image and automatic reference image selection depending on the stand positioning.
1	14432926	**Card acq. mode w/high speed** Fast acquisition module for DR and DSA as well as digital card acquisition technology with frame rates of 7.5, 10, 15 and 30 f/s, acquisition, display and storage in 1k matrix.
1	14432947	**Fluoro Loop** Storage and review of dynamic fluoroscopic sequences (Fluoro Loop). This saves an additional acquisition and reduces dose. The maximum storable fluoroscopic time depends on the selected pulse rate, e.g. 34 s at 30 p/s, 68 s at 15 p/s.
1	14432943	**Vascular analysis** Vessel analysis with determination of degree of stenosis, distance measurement and calibration.
1	14432942	**LV Analysis** Analysis of the left ventricular function of the heart.
1	14455582	**syngo Valve Guide Engine** Application software for reconstruction, post-processing and handling of 3D information including specific applications to support valve implantation or replacement procedures like TAVI/TAVR. The package includes the following functionalities: - 3D high-contrast and CT-like soft-tissue imaging (syngo DynaCT and syngo DynaCT Cardiac triggered/ untriggered) - syngo DynaCT Cardiac uses proven algorithms to perform 3D-reconstruction of ventricles and vessels of the heart from projection images of a rotational angiography. - acquisition of large 3D volume for Dyna CT with faster reconstruction. Resulting in better image quality, less motion artifacts and the possibility of saving contrast medium

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Qty	Part No.	Item Description
		- syngo DynaCT Cardiac uses proven algorithms to perform 3D-reconstruction of ventricles and vessels of the heart from projection images of a rotational angiography - 3D roadmap for dynamic overlay of planning data and 3D volumes on live fluoroscopy workflow support for valve implantation or replacement - In-room control for table-side operation of advanced applications - 3D Wizard for expert step-by-step guidance in 3D acquisition - Parallel patient processing capabilities - Fusion functionality for integration of pre-interventional 3D datasets also from other modalities into the Angio-room - Marking of points or lines on the 3D geometry or MPRs and overlay of these markings on live fluoroscopy.
1	14443019	**syngo EVAR Guidance** A dedicated application providing easy and automatic 3D image guidance during EVAR procedures. Pre-acquired CT datasets are processed to automatically provide the relevant information for 3D image guidance; typically in less than 1 minute. The application provides: Fully automatic mesh modeling of the aortic wall Fully automatic generation of ostia target rings of main branched vessels Automated proposal of stent graft landing zones Automatic calculation of optimal C-arm angulations for stent deployment and radiation-free C-arm positioning The important anatomical landmarks can be overlaid with the live fluoroscopy or DSA for continuous dynamic 3D image guidance during the procedure.
2	14432953	**Lower body radiation protection** This radiation shield protects the user from scattered radiation when standing at the table side. It can be attached to the accessory rails either on the right or on the left side of the patient positioning table. It provides the user an additional accessory rail. It includes a basic unit (71.5 cm x 75 cm / 28.2" x 29.5" (l x w); 7.7 kg / 16.98 lb), one lower body radiation protection pivot swivel element (77 cm x 48 cm / 30.3" x 18.9" (l x w); 3.8 kg / 8.4 lb) and three clip-on units (57 cm / 22.4" x 33 cm / 12.99" (l x h), 2.2 kg / 4.85 lb; 27 cm / 10.6" x 33cm / 12.99", 0.9 kg / 1.98 lb and 27 cm / 10.6" x 25cm / 9.8", 1 kg / 2.2 lb) with a lead of 0.5 mm / 0.02" Pb. The maximum weight of the accessory rails is 40 kg (88.2 lb). Intended only for use with Artis / ARTIS tables.
1	14443011	**Large Display diagn. Protection** The high quality laminated glass protective screen protects the panel of the monitor against mechanical damage and fluid ingress on the front. It is suited for clinical image evaluation. Features: The laminated glass enforces high mechanical strenght and resistivity against mechanical impact, the special coating reduces reflections for a continuous image quality, excellent spectral transmisison of at least 98%, can be added to existing Artis Large Display installations. Weight: approx. 12kg (55") up to 16kg (60") Note: Observe the maximum permissible load of the display suspension, a combination with other options mounted to the display suspension might be restricted.

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Qty	Part No.	Item Description
1	14455544	**Tabletop - narrow** Narrow-shaped carbon fiber patient positioning tabletop with head-end recess. Ideal for cardiological applications. Tabletop tapered in the thorax area for maximum freedom of C-arm angulation. Maximum patient weight: 280 kg / 617.3 lb Weight: 13 kg / 28.7 lb Length: 2287 ± 1 mm / 90.1" ± 0.04" Width head-end: 228 ± 0,5 mm / 9.0" ± 0.02" Width middle body: 480 ± 0.8 mm / 18.9" ± 0.03" Width lower body: 525 ± 0.5 mm / 20.7" ± 0.02" Intended only for use with ARTIS tables.
1	14455547	**Mattress - thin** Matching, special-foam mattress, 4 cm, incl. a latex-free cover. This visco-elastic comfort mattress reacts to temperature and has the special property of adapting to the individual body shape under the influence of body weight and heat. Mattress thickness: 40 ± 5 mm / 1.6" ± 0.2"
1	14440565	**Body Module** This mounting frame is a table module with accessory rails for mounting control modules on the tabletop near the patient's abdomen. It includes a radiolucent carbon fiber board with accessory rails attached to the right and left slides over the outer edges of the patient tabletop. Maximum weight: 40 kg / (88.19 lb) Weigth: 5.8 kg / (12.79 lb) Width carbon fiber board: 47.5 cm / 18.7" Width with accessory rails: 54.5 cm / 21.46" Length accessory rails: 45 cm / 17.7" Length: 48 cm / 18.9 " Intended only for use with Artis / ARTIS narrow tabletop. Not for use with MediGuide Technology.
1	14440447	**Acc. rail module, wide tabletop** This is an attachable module with accessory rails for placing the control modules near the patient's abdomen. It includes a carbon fiber module with accessory rails (45 cm / 17.7") attached to the right and left slides over the outer edges of the patient positioning tabletop. Length: 48 cm (18.9 ") Width (without accessory rails): 47.5 cm (18.7") 55 cm / 21.65" Width (with accessory rails): 54.5 cm (21.5") 62 cm / 24.4" Length: 62 cm (24.4") Weight: 5.9 kg (13 lb) Maximum weight: 40 kg (88.19 lb). Intended only for use with Artis / ARTIS wide tabletop.
1	14440448	**Bendable anesthesia screen** This flexible anesthesia screen holder serves as a holder for sterile drape (anesthesia screen) placed between the head and abdomen of the patient. It includes one anesthetic arm and brackets for mounting it onto the accessory rails. Weight: 1 kg / 2.21 lb, With holders: 1.75 kg / 3.86 lb. Length: 143 cm / 56.4". It requires the presence of accessory rail modules to which it will be mounted.
1	14440460	**Arm holder (pair)** The patient's arms can be comfortably placed along the body using these two arm holders. They slide underneath

Qty	Part No.	Item Description
		the patient mattress and is held in position by the patient's weight. It includes two pairs of arm holders of different length (540 mm / 690 mm - 21.2" / 27.2") and height (85 mm / 115 mm - 3.35" / 4.53"), suitable both for thick and thin patient mattresses. Weight small arm holder: each 0.65 kg / 1.43 lb Weight large arm holder: each 0.95 kg / 2.09 lb. Intended only for use with Artis / ARTIS tables.
1	14440474	**Body strap set** Can be used to secure patient to the patient table and to compress patient anatomy. It consists of two belts with Velcro straps (l x w: 185 cm x 10 cm / 72.8" x 3.94"). Intended only for use with Artis / ARTIS tables.
1	14455561	**Sec. operation in the control room** Preparation for system operation from control room.
1	14455565	**2nd op. ctrl. handswitch (C-Room)** Additional hand switch in control room for radiation release and additional control functions.
1	14455536	**VOLCANO s5i cable set** Cable set for operating the Volcano s5i ultrasound system incl. s5iz and s5iu (CORE-System). It contains all cables for connecting the components at the patient table to the s5i imaging system in the control room. This cable set will already be integrated into the Artis table in the factory. With this item, a display is delivered additionally for the examination room if an Artis Large Display was not ordered. If an Artis Large Display is ordered, the configuration includes a connection kit for the Artis Large Display instead of the 19" display.
1	14432950	**DICOM RIS-Modality Worklist** Import of patient/examination data from an external RIS/HIS patient management system with DICOM MWL (Modality Worklist).
1	14432951	**DICOM MPPS** Feedback of examination status via DICOM MPPS (Modality Performed Procedure Step) to an external RIS/HIS patient management system. Data such as the dose-area product can be transferred to the RIS.
1	14434201	**OEM recording system interface** Cable connection to an OEM measurement system. Holder for the ECG interface when using an OEM measurement system in the examination room. Recording, storage, and display of an ECG lead. Displayed together with the image information on a single monitor.
1	14455597	**Customer documentation - 2nd copy** Second operator manual
1	14455574	**Large Display (3rd party)** Preparation for a large color flat screen display installed on a third-party display holder for the examination room. Note: For safety reasons, third-party display holders in combination with Large Display must meet the following criteria: To prevent injuring the patient when positioning the display holder above the table, it has to be possible to manually move the third-party display holder vertically with a force of up to 85 N. In the event that the angiography system comes into contact with the third-party display holder, it must be possible to push away the holder in a horizontal direction with a force less than 50 N. Otherwise, there is a risk of crush injury to persons or material damage.

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Lori Stapp - (334) 546-7050

Qty	Part No.	Item Description
		Please note that components supplied by Siemens (displays, cables) can be installed on an existing third-party display holder only by the manufacturer of that holder. A connection kit for the large display is included.
1	AXA_P_HYORSYSED_2	**Hybrid OR System Clinical Education 2** The Hybrid OR System Clinical Education - Option 2 is recommended for sites that are prepared to learn specialized or advanced procedures & further increase efficiencies. This program is designed to provide your staff with specific training to optimize system hardware & software, clinical workflow, & operating safety. Our training strategy is based on a blended learning approach of online, classroom, workshops, applications, & case support conducted in 3 phases. An in-depth needs analysis is performed by your Siemens Hybrid OR Education Specialist prior to implementing the training. A Siemens Hybrid OR Education Specialist is assigned to your account for the duration of the program and works with your facility's designated Hybrid OR Training Coordinator. Your facility's Hybrid OR Training Coordinator plays a vital role in helping the Siemens team deliver high-quality and effective training. Your coordinator will be responsible for organizing training activities & communications to key stakeholders-physicians, technologists, nurses & general OR staff throughout program. Once training events are scheduled, customer is responsible to ensure key stakeholders are present for scheduled training & have completed affiliated training pathways. Phase 1 Pre-training begins prior to going live and includes online courses, onsite workshops, & onsite clinical application sessions. Phase 2 Go Live training is conducted by your Hybrid OR Education Specialist who will guide staff members & reinforce concepts & practices acquired during pre-training as they begin to operate on patients. Phase 3 Ongoing follow-up training includes both on-site & classroom experiences designed to ensure your staff continues to receive necessary support & new procedure training. This educational offering must be completed (18) 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	AXA_OR_ELRN	**OR e learning Program** AXA_OR_ELRN This e-learning subscription program will include self-paced modules for radiation safety, x-ray basics, environmental staff training, and system product training. Access for up to 50 participants will be provided. 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	AXA_HOVFOLLSES	**Hybrid OR Virtual Follow-up Session** This virtual follow up consultation, up to 1 hour in length, is designed to reinforce essential clinical applications and workflow concepts following an onsite training event. Through direct communication with a clinical education specialist, there will be opportunity to review, discuss and receive recommendations on clinical practices. One hour consultation sessions will be scheduled during standard business hours, Monday through Friday. This training must be completed by the later of (12) months from purchase or install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	E93PM150UAX	**Eaton 93PM-150 kW UPS** Complete system backup without interruption. One UPS per lab. Includes the following: Eaton 93PM UPS Electronics Cabinet w/integrated maintenance bypass sidecar Eaton 93PM Single Battery Cabinet System (Full load back-up time @ 150kW of 7.1 minutes.) Eaton 93PM Remote Monitoring Panel Network Card Eaton 24x7 start-up One year (24x7) warranty through Eaton Corp. Not approved for sites that require OSHPD. Shipment is to customer's dock. Customer is responsible for logistics from the dock to inside location.
1	IECAX480V125A	**IEC Main Disconnect Panel - AX/125A** Integrated Electrical Cabinet/Main Disconnect Panel for Artis single plane systems. Components supplied:

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Qty	Part No.	Item Description
		• IEC Main Disconnect Panel • The Installation, Operations and Service Manual • 4 sets of Emergency Power Off push buttons Panel Dimensions: 30 in x 20 in x 8 in (H x W x D) Weight: 67 pounds This product is certified for OSHPD sites. DOES NOT INCLUDE installation. Customer is responsible for the installation of the cabinet. Includes one year warranty. Service provided by Siemens.
1	AXA_STD_RIG_QZEEGO	**Standard Rigging Q zeego**
1	AXA_ADDL_RIGGING	**Additional Rigging AXA $2,280**

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Quote Nr:	**1-MDIUHZ Rev. 0**
Terms of Payment:	00% Down, 80% Delivery, 20% Installation Free On Board: Destination
Purchasing Agreement:	ASCENSION HEALTH (CE00743) ASCENSION HEALTH (CE00743) terms and conditions apply to Quote Nr 1-MDIUHZ

ACUSON NX3 Elite ultrasound system

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

Qty	Part No.	Item Description
1	11361999	**NX3 ELITE, BASE CONFIGURATION** The ACUSON NX3 Elite ultrasound system is a mid-range cart product in the Siemens ACUSON ultrasound systems product line. Built from the ground up, with newly designed image processing architecture and a stunning new lightweight and compact design, it delivers exquisite image quality on the largest monitor in its class, along with workflow efficiency using the new tactile and touch user interface. With a broad range of applications that meet the customers' day-to-day and specialized needs, the ACUSON NX3 Elite edition is the system of choice for the most demanding radiology and shared service customers. The base configuration includes: ACUSON NX3 Elite 100V/115V/230V mainframe Wireless software license (USB wireless dongle hardware sold separately) Integrated gel warmer Anatomical M-mode for cardiac exam types DTI Doppler tissue imaging capability
1	11235412	**1.0 SW, NX3 Elite** ACUSON NX3(tm) ultrasound system product-specific operating software release 1.0.
1	11235429	**Operating Sys,USA English,NX3 Elite** Product-specific operating software. Control panel and detailed instructions written in English.
1	11235413	**Power Cord, 115V, North America** Custom cordset and plug for North America. Valid only with 115V fuse. Cordset also compatible for use in Brazil, Canada, Korea, Mexico, Philippines, Saudi Arabia, Taiwan, and the USA.
1	11235480	**DICOM SR Bundle, NX3 Elite** The DICOM Structured Reporting (SR) Bundle enables the following DICOM structured reporting packages: DICOM SR Cardiac DICOM SR OB/GYN DICOM SR Vascular
1	11235473	**QuikStart Option, NX3 Elite** QuikStart allows for fast and easy access to imaging by reducing the time required for power-up and power-down events.
1	11235578	**VF10-5, Linear Transducer,NX3 Elite** The VF10-5 linear array transducer provides excellent contrast and detail resolution for superficial imaging. Wideband MultiHertz(tm) multiple frequency imaging provides multiple transmit frequencies for optimal resolution

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Qty	Part No.	Item Description
		and penetration. Primary applications include small parts, musculoskeletal, and vascular imaging.
1	USD_INITIAL_8	**Initial onsite training 8 hrs-FMV $2450** Up to (8) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. 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	ACU_SVC_NX 3E_2YR	**USD Ext Warrty NX3E 2YR (FMV $4.3K)**
1	ACU_XWR_NX 3E_2YR	**Offset for NX3E Ext Warrty 2YR**

Contract Total: $1,648,000

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OPTIONS on Quote Nr: **1-LUUJSO Rev. 2**

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OPTIONS for ARTIS pheno

All items listed below are OPTIONS and will be included on this system ONLY if initialed: *(See Detailed Technical Specifications at end of Proposal.)*

Qty	Part No.	Item Description	Extended Price	Initial to Accept
1	14432925	**PERISTEPPING / PERIVISION** Motorized stepping for real-time bolus chasing. Gantry stepping with zeego and ceiling mounted systems, table stepping with floor mounted and biplane systems. Peripheral digital angiography with stepping and online subtraction display.	+ $20,208	X
1	14440411	**Intercom - Comfort** Intercom system for communication between examination room and control room. It includes - a microphone with a control box for the control room - a microphone with an adaptive acoustic filter for background noise suppression for the examination room - a footswitch for conversation selection for the examination room The microphone of the examination room is installed on the ceiling.	+ $864	X
1	BART700PEDL	**Mark 7 Arterion, Pedestal System** The Arterion Mark 7 Pedestal contrast medium injector can be positioned anywhere at the patient positioning table on a mobile unit, for direct operation of all functions in the examination room. The injector system includes: A mobile pedestal stand with electronics unit, a contrast medium heater and a connection cable to the manual release. A support arm with injector head and a control lever for moving the injector head. A user control console with large touch screen and corresponding additional monitoring display on the injector head. Functions Pressure limitation: for 150 ml syringes 689 to 8273 kPa, corresponds to 100 to 1200 psi. . Flow rates for 150 ml syringes: 0.1 to 45 ml/s in increments of 0.1 ml/s 0.1 to 59.9 ml/min in increments of 0.1 ml/min rise/fall: 0 to 9.9 s in increments of 0.1 seconds Release delay for injection or radiation: 0 to 99.9 s in increments of 0.1 s. Adjustable volume for 150 ml syringes: 1 ml to the max. syringe capacity in increments of 1 ml. Fill rate: Variable syringe filling speed 1-20ml/s.	+ $27,067	X

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Qty	Part No.	Item Description	Extended Price	Initial to Accept
		Injection protocols: Up to 40 injection protocols possible. Parameters currently displayed on the touch screen display and on the head display: Injection speed Injection volume Remaining volume Injection duration Applied pressure Contrast medium heating: Nominal 35°C (95°F)+-5°C (9°F) Injection data memory Up to 50 injection data items stored Included in the scope of delivery Injector standard configuration 150 ml SIEMENS interface cable Operator Manual Service manual (English). Power supply 200 V to 250 V; 50/60 Hz.		
1	BINSART700P	**Arterion Pedestal Install**	+ $1,545	**X**
1	VL94A07	**Vitalinq Model 94A-07** Vitalinq Model 94A-07 Communication System A combination intercom and music system designed for the active acoustic environments typical of catheterization, electrophysiology and vascular and interventional radiology labs. The Vitalinq system will include: 1 - 94A-07 Communication Console 1 - monitor microphone 1 - desk microphone 1 - corded headset 1 - headset foot switch 4 - stereo speakers 2 - communication speakers Operations and Owner's Manual All cables necessary to complete installation Installation guidance and 24/7 customer support via an 800 telephone number All equipment is designed in a modular manner and connected by supplied standard ethernet cables which have pre-installed connectors. This allows for quick and easy installation, or if necessary over the life of the system, component replacement. Customer or end user shall be responsible for use and maintenance. Installation and on-site service is not included.	+ $9,000	X
1	VLMC07	**Vitalinq MC-07 Console Extender** Vitalinq MC-07 Console Extender A device which connects to the Vitalinq 94A-07 that can be located away from the 94A-07 console (such as in another room) and to which an additional	+ $1,714	X

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Qty	Part No.	Item Description	Extended Price	Initial to Accept
		headset and/or desk microphone can be connected for two-way communication with the procedure room.		
1	VLHEADSET	**Vitalinq wireless headset** Wireless Headset A high quality wireless headset with adaptor cord which can be used in lieu of a corded headset with either the Vitalinq 94A-07 console or the Vitalinq MC-07 Console Extender.	+ $750	X _____
1	AS_10655939	**RaySafe i2 Personal Dosimetry** The RaySafe i2 package enables continuous improvement of working procedures in X-ray environments by providing staff with personal, real-time information about scattered X-ray dose. The Real-Time Display enables immediate changes in working procedures in order to minimize dose The Personal Dosimeters supply the Real-Time Display with information about each individual's personal dose The Dose View software makes it easy to review radiation data. The optional Dose Manager software makes it easy to report, export and archive radiation data. The RaySafe i2 system includes: 1 x RaySafe i2 Real-Time Display 4 x RaySafe i2 Dosimeters 1 x Dose View software package 1 x RaySafe i2 Cradle 1 x RaySafe i2 Mounting Rack Installation and a one (1) year warranty provided by Unfors	+ $27,000	X _____
1	AS_10655940	**Additional RaySafe i2 Dosimeter** Additional RaySafe i2 Dosimeter	+ $1,219	X _____
1	AS_10655941	**RaySafe Dose Manager software package** The RaySafe i2 dose manager is advanced software for analyzing, reporting and archiving dose information. In addition to i2 dose viewer's features, i2 dose manager handles multiple dosimeters and can retrieve the dose information from multiple real time displays through the hospital network.	+ $3,000	X _____

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OPTIONS on Quote Nr: **1-MDIUHZ Rev. 0**

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OPTIONS for ACUSON NX3 Elite ultrasound system

All items listed below are OPTIONS and will be included on this system ONLY if initialed:

Qty	Part No.	Item Description	Extended Price	Initial to Accept
1	11235581	**VF12-4, Linear Transducer,NX3 Elite** The VF12-4 is a long, 50 mm linear array transducer that utilizes Hanafy lens transducer technology in an ergonomically designed microCase(tm) transducer miniaturization technology design. Wideband MultiHertz(tm) multiple frequency imaging provides multiple transmission frequencies for optimal resolution and penetration. Primary applications include vascular, small parts, musculoskeletal, orthopedics, thyroid, breast, and testicular imaging.	+ $5,500	X
1	11235589	**VF13-5 SP,HighFre,Lnr Xdcr,NX3Elite** The VF13-5SP transducer is a lightweight, high-frequency, hockey-stick "T" shaped transducer with an offset handle and a small footprint. The transducer is ergonomically designed to facilitate intraoperative applications and features an extra-long, lightweight cable (2.4 m). MultiHertz(tm) multiple frequency imaging selection technology expands its clinical versatility. The user can select from multiple 2D and Doppler frequencies, ranging from 13 to 5 MHz. The optimal imaging depth of the transducer is between 3 to 30 mm.	+ $7,975	X
1	11235580	**SG-3 Needle Guide Set, NX3 Elite** Dual-angle hybrid-design needle guide bracket for use in ultrasound-guided needle biopsy procedures. Each kit contains one custom needle guide bracket and a starter box of disposable needle guide clips that support needle sizes from 2.1 mm (14 gauge) to 0.6 mm (23 gauge). The needle guide bracket is reusable and can be high-level disinfected using cold liquid disinfectants, such as Cidex OPA and Cidex.	+ $1,540	X
1	11235562	**CH5-2 Wide Rad CLA Xdcr,NX3 Elite** The CH5-2 transducer uses Hanafy lens transducer technology migrated from Siemens high-end ultrasound systems. This technology ensures uniform image quality throughout the field of view. MultiHertz(tm) multiple frequency imaging provides the user with selectable transmission frequencies for optimal resolution and penetration. The ergonomically designed transducer features microCase(tm) transducer miniaturization technology and SuppleFlex(tm) transducer cables to help reduce repetitive stress injuries. Applications: Adult abdomen, renal, obstetrics, and gynecology. Features include: - 2D, M-mode frequency range: 5-2 MHz - THI frequency range: 5-2 MHz - PW Doppler frequency range: 3-2 MHz - 63 mm aperture available in all imaging modes - Field of view: up to 68° (system-dependent)	+ $2,750	X
1	11235563	**CH4-1 Needle Guide Set, NX3 Elite** The dual-angle, hybrid-design needle guide bracket provides the ability to perform biopsy procedures.	+ $880	X

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FINANCING: The equipment listed above may be financed through Siemens. Ask us about our full range of financial products that can be tailored to meet your business and cash flow requirements. For further information, please contact your local Sales Representative.

ACCESSORIES: Don't forget to ask us about our line of OEM imaging accessories to complete your purchase. All accessories can be purchased or financed as part of this order. To purchase accessories directly or to receive our accessories catalog, please call us directly at 1-888-222-9944 or contact your local Sales Representative.

COMPLIANCE: Compliance with legal and internal regulations is an integral part of all business processes at Siemens. Possible infringements can be reported to our Helpdesk “Tell us” function at www.siemens.com/tell-us.

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Siemens Medical Solutions USA, Inc. General Terms and Conditions

1. GENERAL

1.1 Contract Terms and Acceptance. These terms and conditions constitute an integral part of any contract between Seller and Purchaser identified on the first page hereof and shall govern the sale of the products identified in such contract ("Products"). Purchaser acknowledges that this is a commercial and not a consumer transaction. Purchaser shall be deemed to have assented to, and to have waived any objection to, this Agreement upon the earliest to occur of any of the following: Purchaser's completion or execution of this Agreement; Purchaser's acceptance of all or any part of the Products; Purchaser's issuance of a purchase order for any Products identified on Seller's quotation or proposal; or delivery of the Products to the common carrier for shipment pursuant hereto.

1.2 Refurbished/Used Products. For Products identified on this Agreement as used or refurbished Products, these Products have been previously owned and used. When delivered to Purchaser, such Products will perform in accordance with the manufacturer's specifications. Since pre-owned Products may be offered simultaneously to several customers, the availability of such Products to Purchaser cannot be guaranteed. If the Products are no longer available, Seller will use its best efforts to identify other suitable products in its inventory. If substitute products are not acceptable to Purchaser, then Seller will cancel the order and refund to Purchaser any deposits previously paid. The warranty period for any used or refurbished Products will be separately stated on the quotation.

1.3 Third Party Products. If this Agreement includes the sale of third party products not manufactured by Seller, then Purchaser agrees and acknowledges that (a) Purchaser has made the selection of these products on its own, (b) the products are being acquired by Seller solely at the request of and for the benefit and convenience of Purchaser, (c) no representation, warranty or guarantee has been made by Seller with respect to the products, (d) the obligation of Purchaser to pay Seller for the products is absolute and unconditional, (e) use of the products may be subject to Purchaser's agreement to comply with any software licensing terms imposed by the manufacturer; and (f) unless otherwise indicated by Seller in writing, Seller is not responsible for any required installation, validation, product recall, warranty service, maintenance, complaint handling, or any other applicable FDA regulatory requirements, and the Purchaser will look solely to the manufacturer regarding these services and will assert no claim against Seller with respect to these products.

2. PRICES

2.1 Quotations. Unless otherwise agreed to in writing or set forth in the quotation, all prices quoted by Seller and amounts payable by Purchaser are in U.S. dollars, and include Seller's standard packaging. The prices quoted to Seller assume that the Seller is located in, and will use the Products in, the U.S. If not, such quotation will be void. Unless otherwise stated, the quotation shall only be valid for forty-five (45) days from the date of the quotation.

2.2 Delay in Acceptance of Delivery. Should the agreed delivery date be postponed by Purchaser, Seller shall have the right to deliver the Products to storage at Purchaser's risk and expense, and payments due upon delivery shall become due when Seller is ready to deliver.

3. TAXES

3.1 Any sales, use or manufacturer's tax which may be imposed upon the sale or use of Products, or any property tax levied after readiness to ship, or any excise tax, license or similar fee (excluding the Medical Device Excise Tax as set forth in Section 4191 of the Internal Revenue Code of 1986, as amended) required under this transaction, shall be in addition to the quoted prices and shall be paid by Purchaser. Notwithstanding the foregoing, Seller agrees to honor any valid exemption certificate provided by Purchaser.

4. TERMS OF PAYMENT; DEFAULT

4.1 Payments; Due Date. Unless otherwise set forth in the quotation, Purchaser shall pay Seller as follows: an initial deposit of 10% of the purchase price for each Product is due upon submission of the purchase order, an additional 80% of the purchase price is due upon delivery of each Product, and the final 10% of the purchase price is due upon completion of installation or when the Products are available for first patient use, whichever occurs first. Unless otherwise agreed, all payments other than the initial deposit are due net thirty (30) days from the date of invoice. Seller shall have no obligation to complete installation until the payment due upon delivery is received. Partial shipments shall be billed as made, and payments for such shipments will be made in accordance with the foregoing payment terms.

4.2 Late Payment. A service charge of 1½% per month, not to exceed the maximum rate allowed by law, shall be made on any portion of Purchaser's outstanding balance which is not paid when due. Payment of such service charge shall not excuse or cure Purchaser's breach or default for late payment.

4.3 Payment of Lesser Amount. If Purchaser pays, or Seller otherwise receives, a lesser amount than the full amount provided for under this Agreement, such payment shall not constitute or be construed other than as on account of the earliest amount due Seller. No endorsement or statement on any check or payment or elsewhere shall constitute or be construed as an accord or satisfaction.

4.4 Where Payment Due Upon Installation or Completion. Should any terms of payment provide for either full or partial payment upon completion of installation or thereafter, and completion of installation is delayed for any reason for which Seller is not responsible beyond the installation date set forth in the Notice to Manufacture Letter issued by Seller, as applicable, then the balance of payments shall be due on the day following such installation date.

4.5 Default; Termination. Each of the following shall constitute an event of default under this Agreement: (i) a failure by Purchaser to make any payment when due; (ii) a failure by Purchaser to perform any other obligation under this Agreement within thirty (30) days of receipt of written notice from Seller; or (iii) the commencement of any insolvency, bankruptcy or similar proceedings by or against Purchaser.

Upon the occurrence of any event of default, at Seller's election: (a) the entire amount of any indebtedness and obligation due Seller under this Agreement and interest thereon shall become immediately due and payable; (b) Seller may suspend the performance of any of Seller's obligations hereunder, including, but not limited to, obligations relating to delivery, installation and warranty services; (c) Purchaser shall put Seller in possession of the Products upon demand; (d) Seller may sell or otherwise dispose of all or any part of the Products and apply the proceeds thereof against any indebtedness or obligation of Purchaser under this Agreement; (e) if this Agreement or any indebtedness or obligation of Purchaser under this Agreement is referred to an attorney for collection or realization, Purchaser shall pay to Seller all costs of collection and realization (including, without limitation, a reasonable sum for attorneys' fees); and Purchaser shall pay any deficiency remaining after collection of or realization by Seller on the Products. In addition, Seller may terminate this Agreement upon written notice to Purchaser in the event that Purchaser is not approved for credit or upon the occurrence of any material adverse change in the financial condition or business operations of Purchaser.

4.6 Financing. Notwithstanding any arrangement that Purchaser may make for the financing of the purchase price of the Products, the parties agree that any such financing arrangement shall have no effect on the Purchaser's payment obligations under this Agreement, including but not limited to Sections 4.1 and 4.2 above.

5. EXPORT TERMS

5.1 Unless other arrangements have been made, payment on export orders shall be made by irrevocable confirmed letter of credit, payable in U.S. dollars against Seller's invoice and standard shipping documents. Such letter of credit shall be in an amount equal to the full purchase price of the Products and shall be established in a U.S. bank acceptable to Seller. Purchaser shall have sole responsibility to procure all necessary permits and licenses for shipment and compliance with any governmental regulations concerning control of final destination of Products.

5.2 Purchaser agrees that Products shall not at any time directly or indirectly be used, exported, sold, transferred, assigned or otherwise disposed of in a manner which will result in non-compliance with applicable export Control and US Sanction laws and regulations. If Purchaser purchases a Product at the domestic price and exports such Product, or transfers such Product to a third party for export, outside of the U.S., Purchaser shall pay to Seller the difference between the domestic price and the international retail price of such Product. Purchaser shall deliver to Seller, upon Seller's request, written assurance regarding compliance with this Section in form and content acceptable to Seller.

6. DELIVERY, RISK OF LOSS

6.1 Delivery Date. Delivery and installation dates will be established by mutual agreement of the parties as set forth in the Notice to Manufacture Letter issued

by the Seller, as applicable. Seller shall make reasonable efforts to meet such delivery date(s).

6.2 Risk of Loss; Title Transfer. Unless otherwise agreed to in writing, the following shall apply:

(a) For Products that do not require installation by Seller, and for options and add-on products purchased subsequent to delivery and installation of Products purchased under this Agreement, delivery shall be complete upon transfer of possession to common carrier, F.O.B. Shipping Point, whereupon title to and all risk of loss, damage to or destruction of the Products shall pass to Purchaser.

(b) For Products that require installation by Seller, delivery shall be complete upon delivery of the Products to Purchaser's designated site, F.O.B. Destination; whereupon title to and all risk of loss, damage to or destruction of such Products shall pass to Purchaser upon completion of delivery.

(c) All freight charges and other transportation, packing and insurance costs, license fees, custom duties and other similar charges shall be the sole responsibility of Purchaser unless included in the purchase price or otherwise agreed to in writing by Seller. In the event of any loss or damage to any of the Products during shipment, Seller and Purchaser shall cooperate in making any insurance claim.

7. SECURITY INTEREST/FILING

7.1 Purchaser grants to Seller a security interest in the Products until payment in full by Purchaser. Purchaser shall sign any financing statements or other documents necessary to perfect Seller's security interests in the Products. Purchaser further represents and covenants that (a) it will keep the Products in good order and repair until the purchase price has been paid in full, (b) it will promptly pay all taxes and assessments upon the Products or the use thereof, (c) it will not attempt to transfer any interest in the Products until the purchase price has been paid in full, and (d) it is solvent and financially capable of paying the full purchase price for the Products.

8. CHANGES, CANCELLATION, AND RETURN

8.1 Orders accepted by Seller are not subject to change except upon Seller's written agreement.

8.2 Orders accepted by Seller are non-cancellable by Purchaser except upon Seller's written consent and payment by Purchaser of a cancellation charge equal to 10% of the price of the affected Products, plus any shipping, insurance, inspection and refurbishment charges; the cost of providing any training, education, site evaluation or other services completed by Seller; and any return, cancellation or restocking fees with respect to any Third Party Products ordered by Seller on behalf of Purchaser. Seller may retain any payments received from Purchaser up to the amount of the cancellation charge. In no event can an order be cancelled by Purchaser or Products be returned to Seller after shipment.

8.3 Seller reserves the right to change the manufacture and/or design of its Products if, in the judgment of Seller, such change does not alter the general function of the Products.

9. FORCE MAJEURE

9.1 Seller shall not be liable for any loss or damage for delay in delivery, inability to install or any other failure to perform due to causes beyond its reasonable control including, but not limited to, acts of God or the public, war, civil commotion, blockades, embargoes, calamities, floods, fires, earthquakes, explosions, storms, strikes, lockouts, labor disputes, or unavailability of labor, raw materials, power or supplies. Should such a delay occur, Seller may reasonably extend delivery or production schedules or, at its option, cancel the order in whole or part without liability other than to return any unearned deposit or prepayment.

10. WARRANTY

10.1 Seller warrants that the Products manufactured by Seller and sold hereunder shall be free from defects in material or workmanship under normal use and service for the warranty period. The final assembled Products shall be new although they may include certain used, reworked or refurbished parts and components (e.g., circuit boards) that comply with performance and reliability specifications and controls. Seller's obligation under this warranty is limited, at Seller's option, to the repair or replacement of the Product or any part thereof. Unless otherwise set forth in the Product Warranty attached hereto and incorporated herein by reference ("Product Warranty"), the warranty period shall commence upon the earlier of the date that the Products have been installed in accordance with Section 12.5 hereof (which date shall be confirmed in writing by Seller) or first patient use, and shall continue for twelve (12) consecutive months. Seller makes no warranty for any Products made by persons other than Seller or its affiliates, and Purchaser's sole warranty therefor, if any, is the original manufacturer's warranty, which Seller agrees to pass on to Purchaser, as applicable. The warranty provided by Seller under this Section 10 extends only to the original Purchaser, unless the Purchaser obtains the Seller's prior written consent with respect to any sale or other transfer of the Products during the term of the warranty.

10.2 No warranty extended by Seller shall apply to any Products which have been damaged by fire, accident, misuse, abuse, negligence, improper application or alteration or by a force majeure occurrence as described in Section 9 hereof or by the Purchaser's failure to operate the Products in accordance with the manufacturer's instructions or to maintain the recommended operating environment and line conditions; which are defective due to unauthorized attempts to repair, relocate, maintain, service, add to or modify the Products by the Purchaser or any third party or due to the attachment and/or use of non-Seller supplied parts, equipment or software without Seller's prior written approval; which failed due to causes from within non-Seller supplied equipment, parts or software including, but not limited to, problems with the Purchaser's network; or which have been damaged from the use of operating supplies or consumable parts not approved by Seller. In addition, there is no warranty coverage for any transducer or probe failure due to events such as cracking from high impact drops, cable rupture from rolling equipment over the cable, delamination from cleaning with inappropriate solutions, or TEE bite marks. Seller may effectuate any repairs at Purchaser's facility, and Purchaser shall furnish Seller safe and sufficient access for such repair. Repair or replacement may be with parts or products that are new, used or refurbished. Repairs or replacements shall not interrupt, extend or prolong the term of the warranty. Purchaser shall, upon Seller's request, return the non-complying Product or part to Seller with all transportation charges prepaid, but shall not return any Product or part to Seller without Seller's prior written authorization. Purchaser shall pay Seller its normal charges for service and parts for any inspection, repair or replacement that falls outside of Seller's warranty. Seller's warranty does not apply to consumable materials, disposables, supplies, accessories and collateral equipment, except as specifically stated in writing or as otherwise set forth in the Product Warranty.

10.3 This warranty is made on condition that immediate written notice of any noncompliance be given to Seller and Seller's inspection reveals that Purchaser's claim is covered under the terms of the warranty (i.e., that the noncompliance is due to traceable defects in original materials and/or workmanship).

10.4 Purchaser shall provide Seller with both on-site and remote access to the Products. The remote access shall be provided through the Purchaser's network as is reasonably necessary for Seller to provide warranty services under this Agreement. Remote access will be established through a broadband internet-based connection to either a Purchaser owned or Seller provided secure end-point. The method of connection will be a Peer-to-Peer VPN IPsec tunnel (non-client based) with specific inbound and outbound port requirements.

10.5 Warranty service will be provided without charge during Seller's regular working hours (8:30-5:00), Monday through Friday, except Seller's recognized holidays. If Purchaser requires that service be performed outside these hours, such service can be made available at an additional charge, at Seller's then current rates. The obligations of Seller described in this Section are Seller's only obligations and Purchaser's sole and exclusive remedy for a breach of product warranty.

10.6 SELLER MAKES NO WARRANTY OTHER THAN THE ONE SET FORTH HEREIN AND IN THE PRODUCT WARRANTY. SUCH WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES, AND SUCH CONSTITUTES THE SOLE AND EXCLUSIVE WARRANTY MADE WITH RESPECT TO THE PRODUCTS, SERVICE OR OTHER ITEM FURNISHED UNDER THIS AGREEMENT.

10.7 In the event of any inconsistencies between the terms of this Section 10 and the terms of the Product Warranty, the terms of the Product Warranty shall prevail.

11. LIMITATION OF LIABILITY

11.1 In no event shall Seller's liability hereunder exceed the actual loss or damage sustained by Purchaser, up to the purchase price of the Products. The foregoing limitation of liability shall not apply to claims for bodily injury or damages to real property or tangible personal property to the extent arising from Seller's negligence or a product defect.

11.2 SELLER SHALL NOT BE LIABLE FOR ANY LOSS OF USE, REVENUE OR ANTICIPATED PROFITS; COST OF SUBSTITUTE PRODUCTS OR SERVICES; LOSS OF STORED, TRANSMITTED OR RECORDED DATA; OR FOR ANY INDIRECT, INCIDENTAL, UNFORESEEN, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES WHETHER BASED ON CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER THEORY OR FORM OF ACTION, EVEN IF SELLER HAS BEEN ADVISED OF THE POSSIBILITY THEREOF, ARISING OUT OF OR IN CONNECTION WITH THIS

AGREEMENT OR THE SALE OR USE OF THE PRODUCTS. THE FOREGOING IS A SEPARATE, ESSENTIAL TERM OF THIS AGREEMENT AND SHALL BE EFFECTIVE UPON THE FAILURE OF ANY REMEDY, EXCLUSIVE OR NOT.

12. INSTALLATION - ADDITIONAL CHARGES

12.1 General. Unless otherwise expressly stipulated in writing, the Products shall be installed by and at the expense of Seller except that Seller shall not provide rigging or site preparation services unless otherwise agreed to in writing by Seller for an additional charge. Seller will not install accessory items such as cabinets, illuminators, darkroom equipment or processors for X-Ray and CT equipment, unless otherwise agreed to in writing by Seller.

12.2 Installation by Seller. If Seller specifies it will install the Products, the following applies: subject to fulfillment of the obligations set forth in Section 12.3 below, Seller shall install the Products and connect them to the requisite safety switches and power lines to be installed by Purchaser. Except as otherwise specified below, if such installation and connection are performed by Seller's technical personnel, prices shown include the cost thereof, provided that the installation and connection can be performed within the Continental United States or Puerto Rico and during normal business hours. Any overtime charges or other special expenses shall be additional charges to the prices shown.

12.3 Purchaser's Obligations. Purchaser shall, at its expense, provide all proper and necessary labor and materials for plumbing service, carpentry work, conduit wiring, and other preparations required for such installation and connection. All such labor and materials shall be completed and available at the time of delivery of the Products by Seller. Additionally, Purchaser shall provide free access to the installation site and, if necessary, safe and secure space for storage of Products and equipment prior to installation by Seller. Purchaser shall be responsible, at its sole cost and expense, for obtaining all permits, licenses and approvals required by any federal, state or local authorities in connection with the installation and operation of the Products, including but not limited to any certificate of need and zoning variances. Purchaser shall provide a suitable environment for the Products and shall ensure that its premises are free of hazardous conditions and any concealed or dangerous conditions and that all site requirements are met. Seller shall delay its work until Purchaser has completed the removal of any hazardous materials or has taken any other precautions and completed any other work required by applicable regulations. Purchaser shall reimburse Seller for any increased costs and expenses incurred by Seller that are the result of or are caused by any such delay. In the event that Seller is requested to supervise the installation of the Products, it remains the Purchaser's responsibility to comply with local regulations. Seller is not an architect and all drawings furnished by Seller are not construction drawings. If local labor conditions, including a requirement to use union labor, require the use of non-Seller employees to participate in the installation of the Product or otherwise causes delays or any additional expenses, then any such additional costs shall be at Purchaser's expense.

12.4 Regulatory Reporting. In the event that any regulatory activity is performed by anyone other than Seller's authorized personnel, then Purchaser shall be responsible for fulfilling any and all reporting requirements.

12.5 Completion of Installation. Installation shall be complete upon the conclusion of final calibration and checkout under Seller's standard procedures to verify that the Products meet applicable written performance specifications. Notwithstanding the foregoing, first use of the Products by Purchaser, its agents or employees for any purpose after delivery shall constitute completion of installation.

13. PATENT, COPYRIGHT AND OTHER INFRINGEMENT CLAIMS

13.1 Infringement by Seller. Seller warrants that the Products manufactured by Seller and sold hereunder do not infringe any U.S. patent or copyright. If Purchaser receives a claim that any such Products, or parts thereof, infringe upon the rights of others under any U.S. patent or copyright, Purchaser shall notify Seller immediately in writing. Provided that Purchaser gives Seller information, assistance and exclusive authority to evaluate, defend and settle such claims, Seller shall at its own expense and option: indemnify and defend Purchaser against such claims; settle such claims; procure for Purchaser the right to use the Products; or remove or modify them to avoid infringement. If none of these alternatives is available on terms reasonable to Seller, then Purchaser shall return the Products to Seller and Seller shall refund to Purchaser the purchase price paid by Purchaser less reasonable depreciation for Purchaser's use of the Products. The foregoing states Seller's entire obligation and liability, and Purchaser's sole remedy, for claims of infringement.

13.2 Infringement by Purchaser. If some or all of the Products sold hereunder are made by Seller pursuant to drawings or specifications furnished by Purchaser, or if Purchaser modifies or combines, operates or uses the Products other than as specified by Seller or with any product, data, software, apparatus or program not provided or approved by Seller, then the indemnity obligation of Seller under Section 13.1 shall be null and void.

14. DESIGNS AND TRADE SECRETS; LICENSE; CONFIDENTIALITY

14.1 Any drawings, data, designs, software programs or other technical information supplied by Seller to Purchaser in connection with the sale of the Products shall remain Seller's property and shall at all times be held in confidence by Purchaser.

14.2 For all Products which utilize software for their operation, such "Applications Software" shall be licensed to Purchaser under the terms of Seller's Software License Schedule attached hereto.

14.3 Seller and Purchaser shall maintain the confidentiality of any information provided or disclosed to the other party relating to the business, customers and/or patients of the disclosing party, as well as this Agreement and its terms (including the pricing and other financial terms under which the Purchaser will be purchasing the Products). Each party shall use reasonable care to protect the confidentiality of the information disclosed, but no less than the degree of care it would use to protect its own confidential information, and shall only disclose the other party's confidential information to its employees and agents having a need to know this information. The obligations of confidentiality set forth herein shall not apply to any information in the public domain at the time of disclosure or that is required to be disclosed by court order or by law.

15. ASSIGNMENT

15.1 Neither party may assign any rights or obligations under this Agreement without the prior written consent of the other, which shall not be unreasonably withheld. Any attempt to do so shall be void, except that Seller may assign this Agreement without consent to any subsidiary or affiliated company, and may delegate to authorized subcontractors or service suppliers any work to be performed under this Agreement so long as Seller remains liable for the performance of its obligations under this Agreement. This Agreement shall inure to and be binding upon the parties and their respective successors, permitted assigns and legal representatives.

16. COSTS AND FEES

16.1 In the event that any dispute or difference is brought arising from or relating to this Agreement or the breach, termination or validity thereof, the prevailing party shall be entitled to recover from the other party all reasonable attorneys' fees incurred, together with such other expenses, costs and disbursements as may be allowed by law.

17. MODIFICATION

17.1 This Agreement may not be changed, modified or amended except in writing signed by duly authorized representatives of the parties.

18. GOVERNING LAW; WAIVER OF JURY TRIAL

18.1 This Agreement shall be governed by the laws of the state where the Product(s) will be installed, without regard to that state's choice of law principles.

18.2 EACH OF THE PARTIES EXPRESSLY WAIVES ALL RIGHTS TO A JURY TRIAL IN CONNECTION WITH ANY DISPUTE UNDER THIS AGREEMENT.

19. COST REPORTING

19.1 Purchaser agrees that it must fully and accurately report prices paid under this Agreement, net of all discounts, as required by applicable law and contract, including without limitation 42 CFR §1001.952(h),in all applicable Medicare, Medicaid and state agency cost reports. Purchaser shall retain a copy of this Agreement and all other communications regarding this Agreement, together with the invoices for purchase and permit agents of the U.S. Department of Health and Human Services or any state agency access to such records upon request.

20. INTEGRATION

20.1 These terms and conditions, including any attachments or other documents incorporated by reference herein, constitute the entire, complete and exclusive statement of agreement with respect to the subject matter hereof, and supersede any and all prior agreements, understandings and communications between the parties with respect to the Products. Purchaser's additional or different terms and conditions stated in a purchase order, bid documents or any other document issued by Purchaser are specifically rejected and shall not apply to the transactions contemplated under this Agreement.

21. SEVERABILITY; HEADINGS
21.1 No provision of this Agreement which may be deemed unenforceable will in any way invalidate any other portion or provision of this Agreement. Section headings are for convenience only and have no substantive effect.

22. WAIVER
22.1 No failure and no delay in exercising, on the part of any party, any right under this Agreement will operate as a waiver thereof, nor will any single or partial exercise of any right preclude the further exercise of any other right.

23. NOTICES
23.1 Any notice or other communication under this Agreement shall be deemed properly given if in writing and delivered in person or mailed, properly addressed and stamped with the required postage, to the intended recipient at its address specified on the face hereof.

24. RIGHTS CUMULATIVE
24.1 The rights and remedies afforded to Seller under this Agreement are in addition to, and do not in any way limit, any other rights or remedies afforded to Seller by any other agreement, by law or otherwise.

25. END USER CERTIFICATION
25.1 Purchaser represents, warrants and covenants that it is acquiring the Products for its own end use and not for reselling, leasing or transferring to a third party (except for lease-back financings).

26. ACCESS TO BOOKS AND RECORDS
26.1 To the extent required by Section 1861(v)(1)(I) of the Social Security Act and the regulations promulgated thereunder, until the expiration of four (4) years after the furnishing of any Product or service pursuant to this Agreement, Seller shall make available, upon written request by the Secretary of Health and Human Services (the "Secretary"), or upon request by the Comptroller General (the "Comptroller"), or any of their duly authorized representatives, copies of this Agreement and any books, documents, records or other data of Seller that are necessary to certify the nature and extent of any costs incurred by Purchaser for such Products and services. If Seller carries out any of its duties under this Agreement through a subcontract with a related organization involving a value or cost of ten thousand dollars ($10,000) or more over a twelve (12) month period, Seller will cause such subcontract to contain a clause to the effect that, until the expiration of four (4) years after the furnishing of any Product or service pursuant to said contract, the related organization will make available upon the written request of the Secretary or the Comptroller, or any of their duly authorized representatives, copies of records of said related organization that are necessary to certify the nature and extent of cost incurred by Purchaser for such Product or service.

27. DISPOSITION OF PRODUCTS
27.1 Purchaser expressly agrees that should Purchaser sell, transfer or otherwise dispose of the Products, Purchaser shall notify Seller in writing and give Seller the opportunity to purchase such Products. With Purchaser's notice, Purchaser shall provide Seller with a copy of the third party's binding offer to purchase the Products and Seller shall have seven (7) days to notify the Purchaser of an offer to purchase the Products.

05/15 Rev.

Siemens Medical Solutions USA, Inc.
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SIEMENS REPRESENTATIVE
Lori Stapp - (334) 546-7050

Software License Schedule
to the Siemens Medical Solutions USA, Inc. General Terms and Conditions

1. DEFINITIONS: The following definitions apply to this Schedule:
"**Agreement**" shall mean the attached (i) Quotation for Products and/or Services including the Terms and Conditions of Sale and applicable schedules; and/or (ii) Software License Agreement describing the software licensed herein and the specific system for which the license is issued.
"**Licensor**" shall mean Siemens Medical Solutions USA, Inc.
"**Licensee**" shall mean the end-user to whom Licensor provides Software or Documentation for its internal use under the Agreement.
"**Software**" shall mean the software described in the attached Agreement, including the following as contained therein: (i) software programs consisting of a series of statements or instructions to be used directly or indirectly in a programmable controller or computer to bring about a certain result and (ii) databases consisting of systemized collections of data to be used or referenced directly or indirectly by a programmed controller or computer. Notwithstanding the foregoing, "Software" does not include "firmware" as such term is conventionally understood. Diagnostic/Maintenance Software also is not included within the scope of the Software licensed under this Schedule, and is available only as a special option under a separate Diagnostic Materials License Agreement and may be subject to a separate licensing fee.
"**Documentation**" shall mean the documents and other supporting materials which are intended to support the use of an associated product, including (but not limited to) instructions, descriptions, flow charts, logic diagrams and listings of the Software, in text or graphic form, on machine readable or printed media.
"**Designated Unit**" shall mean a single control unit or computer identified on the first page of the Agreement, on which Software licensed hereunder may be used by Licensee.
2. SCOPE: The following terms and conditions shall apply to all Software and Documentation provided by Licensor to Licensee under the Agreement (whether included with other products listed in the Agreement or listed separately in the Agreement), together with any updates or revisions thereto which Licensor may provide to Licensee, and all copies thereof, except any Software and/or Documentation licensed directly by Licensor's supplier under a separate end-user license agreement accompanying the Software or the Documentation, in which case Licensee agrees to be bound by that license agreement as a condition to using the Software and/or Documentation. Except as expressly provided herein, and provided that in no event shall the warranties or other obligations of Licensor with respect to such Software or Documentation exceed those set forth in this Schedule, this Schedule shall be subject to the liability limitations and exclusions and other terms and conditions set forth in the Agreement. **ANY USE OF THE SOFTWARE, INCLUDING BUT NOT LIMITED TO USE ON THE DESIGNATED UNIT, WILL CONSTITUTE LICENSEE'S AGREEMENT TO THIS SOFTWARE LICENSE SCHEDULE (OR RATIFICATION OF ANY PREVIOUS CONSENT).**
3. SOFTWARE AND DOCUMENTATION LICENSE: Subject to the payment of any applicable annual license fee(s), whether stated separately or included in the purchase price of another product, and to Licensee's acceptance of all of the obligations set forth herein and to the fulfillment of those obligations, Licensor or, if applicable, its licensor or supplier, hereby grants to Licensee a paid-up, nonexclusive and nontransferable (except as expressly provided in this Schedule) limited license to use the Software provided by Licensor under the Agreement solely for Licensee's own use on the Designated Unit and to use the Documentation in support of Licensee's authorized use of the Software, for the purpose of operating the Designated Unit in accordance with the instructions set forth in the user's manual supplied with the Designated Unit and for no other purpose whatsoever. A separate license is required for each Designated Unit on which the Software is to be used. Licensee may obtain from Licensor one copy of the Software licensed hereunder for backup and archival purposes only as is necessary to support Licensee's own authorized use of the Software, provided that Licensee includes on or in all copies (in any form) all copyright, trade secret or other proprietary notices contained on or in the Software as provided by Licensor. Additional copies of the Documentation may be licensed from Licensor at its then applicable charges. Licensee may make the Software and Documentation (including any copies) available only to its employees and other persons on Licensee's premises to whom such disclosure is necessary to enable Licensee to use the Software or Documentation within the scope of the license provided in this Schedule. If the Software is supplied to any unit or agency of the United States Government other than the Department of Defense, the Software and Documentation are classified as "restricted computer software" and the Government's rights in the Software and Documentation shall be as provided in paragraph (c) (2) of the Commercial Computer Software-Restricted Rights clause in FAR 52.227-19 and any successor laws, rules or regulations thereto. If the Software is supplied to the United States Department of Defense, the Software is classified as "commercial computer software" and the Government is furnished the Software and Documentation with "restricted rights" as defined in paragraph (c) (1) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013 and any successor laws, rules or regulations thereto.
4. PROPRIETARY PROTECTION AND CONFIDENTIALITY: Ownership of and title to the Software and Documentation and all copies, in any form, licensed under this Schedule are and will remain in Licensor or its suppliers at all times. Licensee shall not (i) remove any copyright, trade secret or other proprietary right notices contained on or in the Software or Documentation as provided by Licensor, (ii) reproduce or modify any Software or Documentation or copy thereof, (iii) reverse assemble, reverse engineer or decompile any Software, or copy thereof, in whole or in part (except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation), (iv) sell, transfer or otherwise make available to others the Software or Documentation, or any copy thereof, except as expressly permitted by this Schedule, or (v) apply any techniques to derive any trade secrets embodied in the Software or Documentation. Licensee shall take all appropriate actions to ensure that: (i) the Software does not leave the Designated Unit's equipment location as set forth above, (ii) the Software is not copied by Licensee or any third parties, and (iii) the Software is not used in any equipment other than the Designated Unit. Licensee shall secure and protect the Software and Documentation and copies thereof from disclosure and shall take such actions with its employees and other persons who are permitted access to the Software or Documentation or copies as may be necessary to satisfy Licensee's obligations hereunder. Prior to disposing of any computer medium, computer memory or data storage apparatus, Licensee shall ensure that all copies of Software and Documentation have been erased therefrom or otherwise destroyed. In the event that Licensee becomes aware that any Software or Documentation or copies are being used in a manner not permitted by the license, Licensee shall immediately notify Licensor in writing of such fact and if the person or persons so using the Software or Documentation are employed or otherwise subject to Licensee's direction and control, Licensee shall use reasonable efforts to terminate such impermissible use. Licensee will fully cooperate with Licensor so as to enable Licensor to enforce its proprietary and property rights in the Software. Licensee agrees that, subject to Licensee's reasonable security procedures, Licensor shall have immediate access to the Software at all times and that Licensor may take immediate possession thereof upon termination or expiration of the associated license or this Schedule. Licensee's obligations under this paragraph shall survive any termination of a license, the Schedule or the Agreement.
5. UPDATES AND REVISIONS: During the warranty period or under a separate service contract or software update subscription, revised or updated versions of the Software licensed under this Schedule may be made available, at Licensor's option, to Licensee to use or to test while Licensee continues use of a previous version. Licensee has the right to decide whether to install any such revised or updated versions or to continue use of the previous version after giving due regard to the United States Food and Drug Administration rules and regulations. However, Licensee shall pay Licensor for any services necessitated by any modifications of the Software by Licensee or by Licensee's failure to utilize the current non-investigational version of the Software provided by Licensor. Software updates that provide new features or capabilities or that require hardware changes will be offered to Licensee at purchase prices established by Licensor. Licensor retains the sole right to determine whether an update represents an enhancement of a previously purchased capability or a new capability for which the Licensee will be charged. In addition, some updates may require Applications Training performed by Licensor's personnel that will be offered at Licensor's prevailing rates. Licensor retains the sole right to determine whether an update requires such training.
6. DELIVERY, RISK OF LOSS AND TITLE: Notwithstanding the provisions of Section 6 of the attached Terms and Conditions of Sale, if any, the Software and Documentation licensed hereunder shall be delivered on or

about the delivery date stated in the Agreement unless a separate delivery date is agreed upon. If Software or Documentation licensed hereunder is lost or damaged during shipment from Licensor, Licensor will replace it at no charge to Licensee. If any Software or Documentation supplied by Licensor and licensed hereunder is lost or damaged while in the possession of Licensee, Licensor will replace it at Licensor's then current applicable charges, if any, for materials, processing and distribution. Notwithstanding the provisions of Section 6 of the attached Terms and Conditions of Sale, if any, the Software and Documentation, in any form, and all copies made by Licensee, including partial copies, and all computer media provided by Licensor are and remain the property of Licensor or its supplier. Licensee has no right, title or interest in the Software, the Documentation, or any computer media provided by Licensor, or copies, except as stated herein, and ownership of any such Software, Documentation and computer media shall at all times remain with Licensor or its suppliers.

7. LICENSE TRANSFER: The Software and Documentation, and the license hereunder, may not be assigned, transferred or sublicensed except as hereinafter provided. Upon the sale or lease of the Designated Unit to a third party, Licensee may transfer to such third party, with Licensor's written consent and in accordance with Licensor's then current policies and charges, the license to use the Software and Documentation hereunder, together with the Software, the Documentation, the computer media provided by Licensor, and all copies provided that: (i) Licensee notifies Licensor in writing of the name and address of such third party; (ii) such third party agrees in a written instrument delivered to Licensor to the terms of this Schedule; and (iii) Licensee does not retain any copies of the Software or Documentation in any form.

8. WARRANTIES: Licensor warrants that for the warranty period provided by Licensor under the attached Terms and Conditions of Sale, if any, the Software shall conform in all material respects to Licensor's published specifications as contained in the applicable supporting Documentation. This paragraph replaces Paragraphs 10.1 and 10.4 of any such Terms and Conditions of Sale with respect to the Software and Documentation. Such Documentation may be updated by Licensor from time to time and such updates may constitute a change in specification. Licensee acknowledges that the Software is of such complexity that it may have inherent or latent defects. As Licensee's sole remedy under the warranty, Licensor will provide services, during the warranty period, to correct documented Software errors which Licensor's analysis indicates are caused by a defect in the unmodified version of the Software as provided by Licensor. Licensor does not warrant that the Software will meet Licensee's requirements, or will operate in combinations which may be selected for use by Licensee, or that the operation of the Software will be uninterrupted or error free. Licensee is responsible for determining the appropriate use of and establishing the limitations of the Software and its associated Documentation as well as the results obtained by use thereof.

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9. LICENSE TERM AND TERMINATION: The license for the Software and Documentation is effective on the shipment date of the Software and Documentation (F.O.B. shipping point or F.A.S., as the case may be) and continues until Licensee's possession of the Software and all copies ceases (except in connection with a transfer of the license as permitted by this Schedule) or until otherwise terminated as provided herein. Licensee may terminate the license for the Software and Documentation at any time after discontinuance of use of the Software and Documentation and all copies, upon written notice to Licensor. If Licensee (i) fails to comply with its obligations herein and does not cure such failure within ten (10) days after receipt of notice from Licensor, or (ii) attempts to assign the Agreement or this Schedule or any rights or obligations hereunder without Licensor's prior written consent, then Licensor may terminate the license hereunder and require the immediate discontinuance of all use of the Software and Documentation and all copies thereof in any form, including modified versions and updated works. Within five (5) days after the termination of the license, Licensee shall, at Licensor's option either: (i) return to Licensor the Software and Documentation, and all copies, in any form, including updated versions, along with any computer media provided by Licensor; or (ii) destroy the affected Software and Documentation, and all copies, in any form, including updated versions, and certify such return or destruction in writing to Licensor.

10. MISCELLANEOUS: Since the unauthorized use of the Software and/or Documentation may leave Licensor without an adequate remedy at law, Licensee agrees that injunctive or other equitable relief will be appropriate to restrain such use, threatened or actual. Licensee further agrees that to the extent applicable, (i) any of Licensor's suppliers of Software and/or Documentation is a direct and intended beneficiary of this Schedule and may enforce it directly against Licensee with respect to the Software and/or Documentation provided by such supplier, and that (ii) **NO SUPPLIER OF LICENSOR SHALL BE LIABLE FOR ANY GENERAL, SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR OTHER DAMAGES ARISING OUT OF ANY SUBLICENSE OF THE SOFTWARE AND/OR DOCUMENTATION. THIS LIMITATION ON LIABILITY SHALL APPLY EVEN IF ANY REMEDY FAILS OF ITS ESSENTIAL PURPOSE.**

11. ADDITIONAL PROVISIONS RELATING TO THIRD-PARTY SOFTWARE: If the Software includes software licensed by Licensor from third parties, the following additional provisions shall apply:

(a) If Software is provided by Licensor on separate media and labeled "Recovery Media," Licensee may use the Recovery Media solely to restore or reinstall the Software and/or Documentation originally installed on the Designated Unit.

(b) Licensee is licensed to use the Software to provide only the limited functionality (specific tasks or processes) for which the Designated Unit has been designed and marketed by Licensor. This license specifically prohibits any other use of the software programs or functions, or inclusion of additional software programs or functions that do not directly support the limited functionality, on the Designated Unit. If Licensee uses the Designated Unit to access or utilize the services or functionality of Microsoft Windows Server products (such as Microsoft Windows NT Server 4.0 (all editions) or Microsoft Windows 2000 Server (all editions)), or uses the Designated Unit to permit workstation or computing devices to access or utilize the services or functionality of Microsoft Windows Server products, Licensee may be required to obtain a Client Access License for the Designated Unit and/or each such workstation or computing device. Licensee should refer to the end user license agreement for its Microsoft Windows Server product for additional information.

(c) The Software may contain support for programs written in Java. Java technology is not fault tolerant and is not designed, manufactured, or intended for use or resale as online control equipment in hazardous environments requiring fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, direct life support machines, or weapons systems, in which the failure of Java technology could lead directly to death, personal injury, or severe physical or environmental damage. Sun Microsystems, Inc. has contractually obligated Licensor's supplier to make this disclaimer.

(d) The Software may permit Licensor, its supplier(s), or their respective affiliates to provide or make available to Licensee Software updates, supplements, add-on components, or Internet-based services components of the Software after the date Licensee obtains its initial copy of the Software ("Supplemental Components").

- If Licensor provides or makes available to Licensee Supplemental components and no other end-user software licensing agreement terms are provided along with the Supplemental Components, then the terms of this Software License Schedule shall apply.

- If a supplier of Licensor or affiliates of such a supplier make available Supplemental Components, and no other end-user software licensing agreement terms are provided, then the terms of this Schedule shall apply, except that the supplier or affiliate entity providing the Supplemental Component(s) shall be the licensor of the Supplemental Component(s).

Licensor, its supplier(s), and their respective affiliates reserve the right to discontinue any Internet-based services provided to Licensee or made available to Licensee through the use of the Software.

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(f) Licensee acknowledges that portions of the Software are of U.S. origin. Licensee agrees to comply with all applicable international and national laws that apply to the Software, including the U.S. Export Administration Regulations, as well as applicable end-user, end-use and destination

restrictions issued by U.S. and other governments. For additional information on exporting software supplied by Microsoft, see http://www.microsoft.com/exporting/.

Revised 03/15/05

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TRADE-IN EQUIPMENT REQUIREMENTS

THE FOLLOWING APPLIES ONLY TO THE EXTENT THAT THE QUOTATION INCLUDES AN EQUIPMENT TRADE-IN. THESE REQUIREMENTS ARE IN ADDITION TO ANY OTHER REFERENCED TERMS AND CONDITIONS ON THE QUOTATION AND SHALL REMAIN IN EFFECT REGARDLESS OF ANY CONTRARY LANGUAGE IN THE QUOTATION.

This Quotation includes the trade-in equipment described herein and referenced by either the Project Number identified in the Quotation hereof (non-ultrasound) or the Trade Allowance Part Number (Ultrasound) as further described in the associated Trade Sheet which is incorporated herein by reference. Purchaser certifies that the description of the trade-in equipment as set forth on the Trade Sheet is a true and accurate representation of the equipment, and that the equipment is in good working condition unless otherwise noted on the Trade Sheet.

The trade-in equipment must be made available for removal no later than turnover of the new equipment. Purchaser must vacate the room of all items not listed on the Trade Sheet, or otherwise clearly identify all items listed on the Trade Sheet, prior to the start of the de-installation. If this is not done, Seller will have no liability for items which are subsequently removed or scrapped. If the de-installation or return of the trade-in equipment is delayed by Purchaser for reasons other than a force majeure event, or if upon inspection by Seller it is determined that the equipment does not meet the manufacturer's operating specifications, or if any items listed as included on the Trade Sheet are not made available at the time of de-installation, then trade-in value will be re-evaluated and any loss in value or additional costs incurred by Seller shall be deducted from the established trade-in value and the pricing set forth on this Quotation will be adjusted by change order. In the event that access to the non-ultrasound trade-in equipment is denied past 14 days from turnover, or access to ultrasound trade-in equipment is denied past 30 days from turnover, then Purchaser shall pay to Seller a rental fee in the amount 3.5% of the total trade-in value plus any additional value provided by an Elevate/Promotional program included in this quotation (no less than $1000) for each month, or part thereof, that access is denied. In addition, if the purchase and installation of the new equipment covered by this Quotation is not completed, then Seller shall invoice Purchaser for all costs and expenses incurred by Seller in connection with the de-installation and removal of the trade-in equipment, including but not limited to labor, materials, rigging out, and transportation, which costs shall be paid by Purchaser within thirty (30) days of the invoice date.

Purchaser further acknowledges and agrees that (i) the trade-in equipment will be free and clear of all liens and encumbrances including, but not limited to, unpaid leases and loans, and that upon request, it will execute a bill of sale or other documents reasonably satisfactory to Siemens to transfer title and ownership of the equipment to Seller, (ii) it is Purchaser's sole responsibility to delete all protected health information and any other confidential information from the equipment prior to de-installation, without damaging or cannibalizing the equipment or otherwise affecting the operation of the equipment in accordance with its specifications, (iii) the equipment, including all updates, upgrades, modifications, enhancements, revisions, software, S/W disks and manuals, shall be returned to Siemens in good operating condition, reasonable wear and tear excepted, and (iv) to the extent not prohibited by applicable law, Purchaser shall indemnify and hold Seller harmless from and against any and all claims, demands, causes of action, damages, liability, costs and expenses (including reasonable attorney's fees) resulting or arising from Purchaser's failure to comply with item (i) above.

FOR MR SYSTEMS: cryogen levels must be least 65% upon time of de-installation. FOR MOBILE SYSTEMS: system must be road worthy and a state issued title transferring ownership to Seller (or Designee) must be received prior to the removal of the mobile system. FOR MODALITY TRADE SYSTEMS (non-ultrasound): The trade-in equipment must be available for inspection within two weeks of the scheduled de-installation date. In addition, Purchaser must provide a clear path for the removal of the trade-in equipment. Any additional costs due to the need to use a larger rig (other than a standard 80 ton rig), as well as any construction activities, street closings, permits, etc., required to de-install/remove the equipment are out-of-scope costs and will be the responsibility of Purchaser.

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Ultrasound (US) Warranty Information

Product (New Systems and "ECO" Refurbished Systems Only)	**Period of Warranty** [1] [2]	**Coverage**
New US Systems [3,4]	12 months	Full Warranty (parts & labor excluding consumables)
ACUSON P500[4]	12 months Months 13 through 60	Full Warranty (parts & labor excluding consumables) Limited to 1 tier transducer per year
ACUSON P300[4]	24 months	Full Warranty (parts & labor excluding consumables)
Refurbished US Systems [3]	12 months	Full Warranty (parts & labor excluding consumables)

The parts warranty below only applies to purchased parts, not to replacement parts provided pursuant to a warranty. Repairs or replacements shall not interrupt, extend or prolong the term of the warranty.		
Transducers sold with New US Systems	12 months	Wear and Failure only (damage not included)
Transducers sold with ACUSON Freestyle	24 months	Wear and Failure only (damage not included)
TEE probes sold with New US Systems	12 months	Wear and Failure only (damage not included)
Ultrasound Upgrades (includes Transducers, TEE's, OEMs and Upgrade)	3 months	Full Warranty (parts & labor: wear and failure only on transducers & probes)
Consumables	Not covered	

Post-Warranty (after expiration of system warranty) – Replacement parts only!		
Spare Parts	6 months	Parts only
Transducers	6 months	Parts only
TEE Probes	6 months	Parts only
Consumables	Not covered	

Note: Optional extended warranty coverage can be obtained by purchase of a service agreement.

[1] Period of warranty commences from the date of first use or completion of installation, whichever occurs first. In the event the completion of installation is delayed for reasons beyond Siemens' control, the stated warranty period shall commence 60 days after delivery of equipment.

[2] While product shall be delivered FOB shipping point, seller will maintain risk of loss of purchaser's equipment during travel from the factory to the purchaser's destination, and shall be responsible for insuring the equipment during such transit.

[3] Trade-in Warranty policy: **New and refurbished systems sold with trade-ins come with a 12 month warranty**. The warranty is reduced to 90 days if the same system is traded in (e.g. Sequoia to Sequoia trade-in for e.g.). System warranty applies to all transducers, probes and OEM's sold with the system.

[4] The warranty terms on the following page apply to the ACUSON P300, P500 or Freestyle ultrasound systems included in the Quotation in lieu of paragraph 10 of Siemens Medical Solutions USA, Inc. General Terms and Conditions.

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40 Liberty Boulevard, Malvern, PA 19355
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WARRANTY TERMS FOR ACUSON® P300, P500 AND FREESTYLE™ ULTRASOUND SYSTEMS

10. WARRANTY (Applicable to ACUSON P300, P500 and Freestyle ultrasound systems only)

10.1 Seller warrants that the Products manufactured by Seller and sold hereunder shall be free from defects in material or workmanship under normal use and service for the warranty period. The final assembled Products shall be new although they may include certain used, reworked or refurbished parts and components (e.g., circuit boards) that comply with performance and reliability specifications and controls. Seller's obligation under this warranty is limited, at Seller's option, to the repair or replacement of the Product or any part thereof. The warranty period commencement date and duration for the Products shall be in accordance with the Ultrasound (US) Warranty Information attached hereto and incorporated herein by reference ("Product Warranty"). Seller makes no warranty for any Products made by persons other than Seller or its affiliates, and Purchaser's sole warranty therefor, if any, is the original manufacturer's warranty, which Seller agrees to pass on to Purchaser, as applicable. The warranty provided by Seller under this Section 10 extends only to the original Purchaser, unless the Purchaser obtains the Seller's prior written consent with respect to any sale or other transfer of the Products during the term of the warranty.

10.2 No warranty extended by Seller shall apply to any Products which have been damaged by fire, accident, misuse, abuse, negligence, improper application or alteration or by a force majeure occurrence as described in Section 9 hereof or by the Purchaser's failure to operate the Products in accordance with the manufacturer's instructions or to maintain the recommended operating environment and line conditions; which are defective due to unauthorized attempts to repair, relocate, maintain, service, add to or modify the Products by the Purchaser or any third party or due to the attachment and/or use of non-Seller supplied parts, equipment or software without Seller's prior written approval; which failed due to causes from within non-Seller supplied equipment, parts or software including, but not limited to, problems with the Purchaser's network; or which have been damaged from the use of operating supplies or consumable parts not approved by Seller. In addition, there is no warranty coverage for any transducer or probe failure due to events such as cracking from high impact drops, cable rupture from rolling equipment over the cable, delamination from cleaning with inappropriate solutions, or TEE bite marks. Repair or replacement may be with parts or products that are new, used or refurbished. Repairs or replacements shall not interrupt, extend or prolong the term of the warranty. Purchaser shall, upon Seller's request, return the non-complying Product or part to Seller with all transportation charges prepaid in accordance with Seller's written instructions, but shall not return any Product or part to Seller without Seller's prior written authorization. Purchaser shall pay Seller its normal charges for service and parts for any inspection, repair or replacement that falls outside of Seller's warranty. Seller's warranty does not apply to consumable materials, disposables, supplies, accessories and collateral equipment, except as specifically stated in writing or as otherwise set forth in the Product Warranty.

10.3 This warranty is made on condition that immediate written notice of any noncompliance be given to Seller and Seller's inspection reveals that Purchaser's claim is covered under the terms of the warranty (i.e., that the noncompliance is due to traceable defects in original materials and/or workmanship).

10.4 Purchaser shall provide Seller with both on-site and remote access to the Products. The remote access shall be provided through the Purchaser's network as is reasonably necessary for Seller to provide warranty services under this Agreement. Remote access will be established through a broadband internet-based connection to either a Purchaser owned or Seller provided secure end-point. The method of connection will be a Peer-to-Peer VPN IPsec tunnel (non-client based) with specific inbound and outbound port requirements. The parties expressly agree that any information derived from the remote access connection regarding the Purchaser and/or its utilization of the Products may be used by Seller provided that any patient information is de-identified and that Purchaser is not identified as the source of any such information.

10.5 Seller may provide Purchaser a comparable system ("Loaned System") while Seller attempts to repair the non-complying Product. Purchaser's use of the Loaned System commences upon receipt of the Loaned System and continues until receipt of the repaired or replaced Product (the "Loan Period"). The Loaned System must be returned to Seller within two (2) business days of receiving the repaired or replaced Product, and in accordance with the Seller's written instructions. The Loaned System shall be returned in the same condition as when delivered, ordinary wear and tear excepted. Title to the Loaned System shall at all times remain with Siemens, but Purchaser will be responsible for equipment that is lost, stolen, or damaged during the Loan Period. Purchaser is also responsible for any personal injuries or property damages caused by the negligent acts or omissions of Purchaser, its officers, directors, employees or agents. Purchaser agrees to use the Loaned System in accordance with all instructions and manuals, and to immediately report to Siemens any malfunction or defect in the Loaned System. If the Loaned System is not returned to Siemens as required by this Subsection 10.5, then Purchaser will be charged, and agrees to pay Seller, the Fair Market Value of the Loaned System. Purchaser's use of the Loaned System is subject to the same Equipment Terms and Conditions and Software License Schedule attached to this Quotation as apply to the original Products.

10.6 SELLER MAKES NO WARRANTY OTHER THAN THE ONE SET FORTH HEREIN AND IN THE PRODUCT WARRANTY. SUCH WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES, AND SUCH CONSTITUTES THE SOLE AND EXCLUSIVE WARRANTY MADE WITH RESPECT TO THE PRODUCTS, SERVICE OR OTHER ITEM FURNISHED UNDER THIS AGREEMENT.

10.7 The obligations of Seller described in this Section are Seller's only obligations and Purchaser's sole and exclusive remedy for a breach of product warranty. In the event of any inconsistencies between the terms of this Section 10 and the terms of the Product Warranty, the terms of the Product Warranty shall prevail. 09/15

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Detailed Technical Specifications

ARTIS pheno

Part No. / Product	Description

14455534
ARTIS pheno - Surgery
	System description
	
	Floor-mounted robotic assisted C-arm:
	- Robotic technology grants the flexibility to position the wide-space C-arm to the needs of the procedure.
	- Realize steeper angulations and extreme views thanks to wide-space C-arm. Medical staff have more space to work with.
	- Adjustable isocenter height for the highest possible level of examination comfort, with flexible park positions for optimal patient access.
	- A single joystick deflection moves the parked C-arm to a chosen imaging position within seconds
	- Stand can travel in RAO/LAO, Cran/Caud, x-, y-, and z-axes
	- Up to 30 system positions and up to 50 user-defined working positions as well as 3 direct positions can be stored and recalled from table side.
	- Intelligent, computer-aided collision monitoring ICP (Intelligent Collision Protection).
	- Stand rotation ±90° minimum
	- Double oblique projections:
	  - LAO/RAO ±200° (maximum angulations vary depending on working position)
	  - cranial +40° to -54° caudal and with table rotation cranial +52° to caudal -78° (maximum angulations vary depending on working position).
	- Variable manual C-arm rotation speeds up to 25 °/s with LAO/RAO and up to 20 °/s with cran/caud;
	- variable rotation, automated runs up to 90°/s
	- Variable longitudinal speed up to 24 cm/s, maximum 27 cm/s (option Perivision required)
	- Variable focal-spot-to-detector distance between 100 cm and 130 cm
	- Isocenter/floor distance adjustable between 104 cm and 150 cm
	- Focus-isocenter distance 78.5 cm
	- Rotational angiography (used to generate 3D datasets, optional) can be performed at head end, left side and right side for pre-calibrated starting positions
	- In case of emergency, system can be moved away from the table quickly by leveraging CPR assist
	- Minimal installation requirements due to free ceiling
	
	Display in the control room
	
	Standard Siemens syngo control via country-specific keyboard and mouse for all imaging system functions such as image post-processing, storing, configuring of organ programs, and optional advanced software applications.
	
	24” TFT color and gray scale image display
	Diagonal screen measurement: 24” (61 cm)
	Image display: 1920 x 1200
	Calibrated luminance: 350 cd/m 2
	Max. contrast ratio: 1000 : 1
	Viewing angles (H, V): 178 °
	
	By choosing a cockpit solution this display will be replaced by the cockpit.
	
	<u>Following accessories as standard included</u>

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Part No. / Product	Description
(Continued) **14455534** **ARTIS pheno - Surgery**	- Cable holder - ECG cable clips **CleanSurface** Smooth and germ-free surfaces: ARTIS pheno® provides passive infection control support to aid regular cleaning and disinfection efforts. Seamless sealed covers with evenly smooth surfaces protect against spills and facilitate easy cleaning. Antimicrobial paint reinforces clean working conditions by countering the emergence of biofilms. • Improved infection control thanks to antimicrobial surfaces • Spill-sealed housing protects C-arm and table modules **CleanGuide** Comprehensive cleaning concept: ARTIS pheno® optimally prepares hybrid operating rooms and interventional suites for infection control. Siemens worked closely with ECOLAB to develop the CleanGuide, a comprehensive cleaning concept for ARTIS pheno that includes cleaning agent recommendations as well as guidance for optimal cleaning procedures. • Validated cleaning agents and recommendations • Tailored sterile drapes for fast and easy C-arm protection • Floor-mounted system without ceiling elements translates into less complex installation and improved “hygienic” conditions **Operating modes** Fluoroscopy - Digital pulsed fluoroscopy with pulse frequencies of 7.5 p/s, 10 p/s, 15 p/s, and 30 p/s in 1k/12 bit matrix. Pulse rates of 0.5 - 4 p/s are also possible with CAREvision. - Overlay fade: On-line overlay of the reference image onto the active fluoroscopy. This improves efficiency and safety during interventional procedures because additional information which is clinically necessary can be displayed directly in the live fluoroscopy image. Digital acquisition technology Digital acquisition technology with frame rates of 0.5 to 7.5 f/s in 1k/12 bit matrix and digital real-time filtration. Single image and serial acquisitions with time-controlled and manually variable frame rate. The 1k image matrix with a bit depth of 12 bits allows an excellent image contrast by using 4,096 shades of grey. Thus, the image quality meets highest expectations in angiography and fulfills all prerequisites for precise diagnostics and safe interventions. Digital Subtraction Angiography: Digital Subtraction Angiography with frame rates of 0.5 to 7.5 f/s, including pixel shift, remask, roadmap, peak opacification for iodine contrast (MaxOpac), and CO_2 contrast (MinOpac); adding of the anatomical background (landmark) from 0 to 100%. Includes the "Advanced Roadmap" additional function which offers the following clinical benefits: - DSA image can be selected as a mask for Roadmap - Zoom can be changed during Roadmap - Catheter and vascular contrast can be changed separately Unexpected patient movements in DSA acquisitions can be corrected easily with Auto Pixelshift. This saves time for the user and improves image quality. **CLEARmap** Special 2D Roadmap operating mode creating a vessel map from a DSA-scene using Maximum Opacification technique. As an additional operating mode, you can also decide to pick one frame out of a DSA run (i.e. for venous access in Roadmap).

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Part No. / Product	Description
(Continued) **14455534** **ARTIS pheno - Surgery**	This provides improved image quality compared to conventional Roadmap, and reduces x-ray dose and contrast media. **CLEARmatch** Automatic/Online pixel shift processing for most accurate subtracted image display during Roadmap and DSA based on real time movement detection and compensation. Six degrees of freedom – vertical, horizontal, rotational, zoom and shearing movement (left and right) - allowing highest possible efficacy. In order to show the most recent information in raw format, the pixel shift operation is applied to the mask image. This optimized way of pixel shifting ensures a perfect match of Roadmap image and native fluoro image, being shown at the Assist monitor. **CARE package** ALARA principle Siemens follows the ALARA principle: "As Low as Reasonably Achievable"; the CARE package (Combined Applications to Reduce Exposure) was developed based on this research and development principle to protect the examiner and the patient. Dose saving - CAREfilter: Intelligent control software that minimizes X-ray dose. During fluoroscopy and acquisition, special copper prefilters are automatically inserted into the X-ray beam depending on current X-ray transparency, which is calculated continuously. This is necessary to ensure that the optimal prefilter value is always active. This automation makes work easier for the user because the optimal filter setting need not be adjusted manually for each case. The adaptive Cu prefiltration has five steps (0.1, 0.2, 0.3, 0.6, 0.9 mm) and is used to lower the reference air kerma and improve radiation quality by reducing the low-energy X-ray radiation. - CAREvision: Pulsed fluoroscopy with additional, reduced pulse rates of 0.5, 1, 2, 3, 4 p/s. Adaptation of pulse rate to the current application requirements for significant reduction of radiation exposure, especially during interventional procedures. - CAREprofile: Radiation-free positioning of the primary and semi-transparent diaphragms by means of graphic display in the LIH (Last Image Hold). Collimator shutters and semi-transparent filters can be adjusted as a graphical overlay on the last-image-hold without any need for fluoroscopy or radiation. - CAREposition: Radiation-free object repositioning by means of graphic display of the X-ray center beam and image edges in the LIH image. With CAREposition it is possible to reposition the object under visual control without radiation. - In case of table movements the current position of the central beam and the image edges are superimposed on the LIH image as orientation points. - Low dose acquisition: enables dose savings of up to 67 % during the examination. The Low Dose Acquisition protocol can be released with a separate pedal on the footswitch. Dose monitoring - CAREwatch: Display of the measured dose-area product and the calculated patient reference air kerma on the flat-screen display. Electronics unit with DIAMENTOR measurement chamber integrated in the collimator housing for dose acquisition. Configurable screens on the data display and imaging system monitor: During fluoroscopy: Reference air kerma rate. During fluoroscopy interval: Accumulated reference air kerma or dose-area product, or percentage of the reference air kerma limit (total from fluoroscopy and acquisition). - CAREguard: Monitoring the reference air kerma. If the accumulated reference air kerma exceeds one of the three configurable limits, a warning appears on the live display and tableside on the touchscreen control. This allows ideal monitoring of the accumulated reference air kerma during the examination. - CAREmonitor: Special model-based monitoring of the measured skin entry dose, taking into account the geometric conditions of the system (actual device angulation, table position, patient weight, patient size). It then continually displays whether the skin entry dose applied to a specific region of the patient's body exceeds a specific configurable upper limit. CAREmonitor continually calculates and displays the actual accumulated skin entry dose as a portion of this upper limit. This helps the user to detect a potential patient hazard at an early stage. The patient is therefore better protected against the damaging effects of radiation.

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(Continued) **14455534** **ARTIS pheno - Surgery**	Dose documentation - CAREreport: Dose information as part of the DICOM Structured Report. After each examination, the information is available in DICOM format and can be sent to a DICOM archive together with the image data, for example. Saving dose information in DICOM format also enables flexible analysis and further processing via a DICOM-capable analysis software/database. - CARE Analytics: Standalone PC program for analyzing doses in angiography, CT, and radiological examinations. The data can be exported to statistics programs such as Microsoft Office Excel and SPSS for further analysis. CARE Analytics is available for download from the Siemens Intranet. **CLEAR package** The CLEAR package enables optimized image quality through real-time processing of the image data without increasing the radiation dose. - CLEARpulse optimizes the X-ray pulse in two ways: the high pulse power allows for additional filtration to reduce radiation. In addition CLEARpulse shortens the X-ray pulse through the use of grid-pulsed flat emitter technology in concert with a high anode rotation speed. The required X-ray energy can be provided in a shorter period of time, thereby shortening the X-ray pulse by up to 43% at constant tube voltage. Moving objects like coronary arteries can be visualized sharper and with less blurring artifacts. - CLEARcontrol: The new histogram analysis provides a more homogeneous image impression by harmonizing over- and underexposed areas of the image. This is done fully automatically, thus eliminating any further manual user corrections through windowing. - CLEARview: Dose-dependent filtering of the image data efficiently suppresses image noise, enabling clear, sharp images, even for low-dose acquisitions. - CLEARvessel: Every pixel is analyzed in real time, and vessel edges are shown in high contrast without adding noise to the image. - CLEARmotion: Fine moving structures, such as small vessels and guidewires, are detected in the image and motion artifacts are suppressed efficiently. The visibility of small moving vessels and guidewires is improved significantly during fluoroscopy. In addition there is Dynamic Density Optimization (DDO) for on-line harmonization of native series and single images. **Image generation** X-ray generator Microprocessor-controlled high-frequency X-ray generator with automatic dose rate control. - Power output: 100 kW at 100 kV (IEC 60601-2-7 and IEC 60601-2-54). - SID tracking: Automatic tube current adaptation to focal-spot-to-detector distance. - CAREmatic: Automatic X-ray control system for fully automatic calculation and optimization of exposure data based on fluoroscopic data. - Patient transparency monitoring. - Tube load monitoring with indication in the live display. The optimal X-ray parameters depend on the transparency of the patient at the current angulation, measured during fluoroscopy. These parameters are continuously calculated and updated. Test shots are no longer required. This ensures superior image quality and minimum radiation exposure for user and patient with every exposure release. StraightView The flat detector and the multileaf collimator are installed on a motorized rotating turntable on the C-arm. They automatically line up with the table swivel, thus ensuring upright images of objects which are in line with the table. The flat detector and multileaf collimator can also be rotated together at any angle relative to the table, enabling upright presentation and collimation of objects which are not in line with the table. Standard functions *Image processing* - Image display as positive and negative, windowing, contrast and brightness control, electronic display shutter,

Part No. / Product	Description
(Continued) **14455534** **ARTIS pheno - Surgery**	image shift (roaming), vertical and horizontal image inversion, magnifying glass, and zoom functions - Storing of single images as reference images for acquisition and fluoroscopy - Quantification: angle and length measurements, automatic and manual calibration - Text functions: user-definable image annotation, free annotation or by means of text components, comments line for the image, R/L display - Fast and direct access to all series, single images, reference images, and photo file images via MULTIMAP. Access possible both in the examination and in the control room for displaying or post-processing images 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. <u>Package includes the following software licenses</u> Basic software with CD and dongle for the following functions: - Patient Browser - Filming Patient Browser: - Patient management. - DICOM communication with Send, Receive, Query/Retrieve, Print. - Reading and importing image data from CDs/DVDs. - Module for writing DICOM CDs/DVDs for data exchange. Writing is in background mode. Filming: 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. **Imaging system** <u>Dual architecture</u> In order to provide highest level system availability, the imaging system consists of two independent computer systems that manage central tasks such as real-time image processing during fluoroscopy or acquisition as well as post-processing and networking functionality separately from one another. This ensures the best possible system performance and availability. <u>Image storage capacity</u> 100,000 images in 1k/12 bit image matrix. This can be optionally extended to 200,000 images. **Image export and networking** <u>Networking</u> - Network interface (1000 BaseT) with the following integrated DICOM services: - 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 and/or a DICOM workstation. The user can perform his examinations without interruption, while the system is fully automatically transferring the images to the archive scene by scene. This is a background process, and thus does not interfere with the ongoing fluoroscopy or acquisition. - 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 provides the necessary certainty to the user before deleting the acquired images locally in the imaging system. - DICOM-Query/Retrieve: Retrieval of archived images from a digital archive or from a workstation: Already archived image data from a previous examination can be fully retrieved and is then available for review and processing. The user can request CT or MR system images from the archive and display the image in the examination room. There is no need for a separate workstation. - DICOM Structured Report: All the quantification results obtained on the system as well as all dose information

Part No. / Product	Description
(Continued) **14455534** **ARTIS pheno - Surgery**	on the individual radiation releases can be saved in DICOM SR (enhanced SR) format and transferred to a DICOM network. 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 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. 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. ECG image data Recording, storage, and display of an ECG lead. The ECG lead is displayed and stored together with the image information. **Siemens Remote Service SRS™** Prepared for Siemens Remote Service SRS™ (during warranty, then with service contract): - Hardware and software remote diagnosis. - System remote configuration, e.g. adding of a DICOM node. Early warning system ensuring system operation. **Customer Care – the customer care solution from Siemens Healthineers** From the moment you purchase your Siemens system you will benefit from many services that are offered by "Customer Care". These include: - Initial application training - Interactive e-learning for various applications - Free customer magazines - Arrangements for clinical training via a global network - Free trial licenses You will find information on our e-learning program and further details on general "Customer Care" services on the Internet. * The availability of "Customer Care" services may be restricted for some systems. **User Training** Siemens recognizes the significant investment you are making in purchasing a new imaging system and are determined that you are able to realize the full capability of this new system. Siemens clinical applications training ensures you have every opportunity to fully utilize your new system. Content of user training: - Initial and follow-up Training - Instruction on system, operator and patient safety. - Instruction on operation of the system.

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(Continued) **14455534** **ARTIS pheno - Surgery**	- Instruction on proper cleaning of the system. - Instruction on basic and advanced imaging User training is based on a core/standard user group which equals 6 people. Delivery & duration of the user training varies and may be country specific. For additional information please contact your local Siemens representative.
14455541 **Performance package**	<u>zen40HDR flat detector (High Dynamic Range)</u> Crystalline silicon flat detector with 50cm diagonal entrance plane. High-resolution crystalline silicon matrix with 160 µm pixel size and 16-bit digitization depth. The active sensor matrix enables strengthening of the signal directly at the pixel, reducing the electronic noise especially for fluoroscopy. Catheters and vascular prostheses can be displayed with extremely low dose, reducing radiation exposure for the patient and personnel. It is particularly beneficial for complex procedures with long fluoro times and when treating children. 160 µm pixel arrays provide highest spatial resolution of up to 3.12 LP/mm and excellent contrast. The detector features 16-bit analog-to-digital conversion, resulting in an extremely high gray scale resolution of 65,000 gray scales. Fluoroscopy as well as image acquisition are always done in 1k matrix and 16 bit gray scale resolution with high detail visibility. Acquisition frame rates of up to 60 f/s are possible. Usable input formats: - Active imaging size (Overview mode) 30 cm x 40 cm, diagonal 50cm (19.7”) - Zoom 1: 30 cm x 30 cm; diagonal 42 cm, (17”) - Zoom 2: 22 cm x 22 cm; diagonal 32 cm, (13”) - Zoom 3: 16 cm x 16 cm; diagonal 22 cm, (9”) - Zoom 4: 11 cm x 11 cm; diagonal 16 cm, (6”) - Zoom 5: 8 cm x 8 cm; diagonal 11 cm, (4”) The compact design with integrated collision protection provides maximum C-arm angulation range for excellent patient access. Motorized adjustment of the detector-patient distance. 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. <u>GIGALIX 125/30/40/90 - X-ray tube assembly</u> Triple-focus high-performance X-ray tube assembly with unique flat emitter technology for generating extremely high tube currents of max. 250 mA in pulsed fluoroscopy and 1000 mA in acquisition large focus. This provides very good image quality even with heavier patients or steep angulations. The focus is always quadratic and permits outstanding perceptibility of small structures with a nominal quadratic focus of 0.3/0.4/0.7. The anode has a high heat storage capacity of 5.2 MHU and the metal center tube with liquid bearing technology allows a maximum cooling power of 1520 kHU/min. This means that pauses are not required during radiation, even for lengthy procedures. The X-ray tube is almost silent, which is an additional benefit for patient and user. StructureScout adapts exposure parameters of ACE to automatically achieve optimal image contrast at ALARA dose. It helps to maximize the detectability of materials, such as iodine, iron, platinum, tantalum, CO2, thanks to a material-specific contrast optimization. At comparable patient thickness and visibility it helps to reduce dose.

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Part No. / Product	Description
(Continued) **14455541** **Performance package**	Rotatable collimator Angio collimator with rectangular blade, wedge-shaped finger filters for DSA and cardiological applications and graduated finger filter. Independent rotation and shift of filter blades.
14455542 **Laser crosshairs**	Class 1M (IEC 60825-1) laser, wavelength 600 – 700 nm (red), < 1 mW output power
14455538 **ARTIS multi-tilt table**	Multi-tilt table with motorized dual-axis tilt and stepping in longitudinal direction for interventional, surgical, electrophysiological, or peripheral examinations, for example, as well as for stabilizing a patient. Inclusive power tabletop control module. Motor supported movement of tabletop in all angulations allows a movement of the patient with virtually zero force independent from table load. The Pilot Module offers comfortable and ergonomic operation of ARTIS pheno®. It provides control over system movements and imaging parameters, all table movements, selection of examination protocols, image acquisition and review, and many other functions. The illuminated controls and touch display are easy to use – even when covered with drapes for sterile operation. C-arm movements aligned with table settings regardless of table height and angulations Touch2Move technology permits safe system movement of any kind, including user interaction with the system. The multi-tilt table is IPX4 rated and therefore fulfilling the high standards required for operating rooms. - Operation range: ±15° lateral tilting (cradle). - +15° head up, - 20°head down. - Iso-tilt functionality for maintaining the projection during table tilt along the patient axis. - Motorized, power-assisted table movement in longitudinal and transversal direction in any table tilt and cradle. Note: It is mandatory to provide UPS back up with this system in order to comply with IEC 60601-2-43 CL. 201.15.101. Reason: In the event of power failure a neutral table position suitable for CPR must be reachable within 15 seconds. Please include a suitable UPS from Siemens as required or make sure any existing / planned UPS provision for your installation site will satisfy the requirement. When ordering a “Cardiology System” a small tabletop with thin mattress will be delivered. When ordering an “Interventional Radiology System” or a “Surgery System” a wide tabletop with a thick mattress will be delivered. **Operation** *syngo* The intuitive syngo operating elements allow for managing the whole process from preparation of the patient to image post processing in a safe, reliable, and time efficient way.

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Part No. / Product	Description
(Continued) **14455538** **ARTIS multi-tilt table**	Footswitch A 4-pedal wired footswitch to release fluoroscopy, exposure, and table brake as well as a configurable additional function is included as standard. For an ideal workflow, full operation capabilities for the system can be accessed directly at the patient table. These include complete system operation through modular control elements for controlling C-arm movements, the patient table, and the multileaf collimator. Touchscreen operation and jog-wheel for operating the imaging system including post-processing and quantification as well as selecting organ programs. The touchscreen is specifically configurable to individual clinical requirements. Multi-functional hand switch (not available in all countries) for acquisition control, switching acquisition frame rates and/or step movements (option for PERISTEPPING and/or PERIVISION). This means that the user can operate the system on their own without having to leave the examination room if this is deemed necessary by the situation.
14432948 **Automap**	Automap optimizes the procedure workflow, especially during interventions. A selected reference image displaying the needed medical information (e.g. before dilatation) is used as the basis for moving the system to the correlated position automatically. The intervention can be continued immediately without manually repositioning the patient. On the other hand, the system is able to select a reference image for the current device position. In case of changes in device position, this enables the user to see the corresponding reference images quickly and safely.
14432943 **Vascular analysis**	Measuring program integrated in the imaging system for objective, precise and reproducible evaluation of vessels. - Automated contour detection. - Determination of degree of stenosis. - Automatic and manual reference diameter determination. - Automatic and manual calibration methods. - Distance and angle measurement. The Vessel analysis allows precise quantification under sterile conditions, direct at table side with the touchscreen control. This speeds up the intervention and makes the procedure safer for the patient. The reports can be easily stored in the patient folder for documentation and to show the correct analysis of dilatations etc. Especially to be used for vessel sizes between 0.5 mm and 50 mm.
14432942 **LV Analysis**	Scientific measuring program integrated in the imaging system for evaluation of the functionality of the left ventricle. - Automated and manual contour detection. - Automatic end-diastole/end-systole detection. - Calculation of ejection fraction, volumes and indices (area, length and Simpson methods). - Centerline, radial and regional wall movement analyses - Automatic and manual calibration methods. - Distance and angle measurement.
14455582 **syngo Valve Guide Engine**	**Contents:** The syngo application software is a dedicated software for image postprocessing. Its functionality can be extended with additional software functions to suit specific user or clinical needs in interventional cardiology, interventional radiology and surgery. The application software features an intuitive and thus easy to learn user interface developed from prototypes tested in close cooperation with users.

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Part No. / Product	Description
(Continued) **14455582** **syngo Valve Guide Engine**	**<u>3D image generation</u>** **3D rotational angiography** In 3D rotational angiography, a sequence of 2D projection images is acquired by the C-arm performing a fast rotation around the isocenter in which the patient is positioned. Immediately after the acquisition image data is handled by time-optimized 3D image data reconstruction. - All parameters required for the 3D reconstruction are included in the organ program. This enables optimized image quality and easy handling, as well as the fastest possible 3D reconstruction. - Rotation speed is up to 88°/s (*syngo* Dyna3D HighSpeed) - Angle triggering allows a reduction in dose through a reduced acquisition frame rate while at the same time achieving better image quality. 3D reconstruction and visualization of a volume are performed in real time in volume rendering technique, MPR, and MIP. 3D Rotational angiography is used in particular as support in interventional radiology and neuroradiology in the angiography laboratory. Based on dedicated acceleration hardware the primary reconstruction results are available in full diagnostic quality in the examination room within 19 seconds for high contrast images and less than 42 seconds for soft tissue DynaCT images. Subsequent secondary reconstructions are available even faster. ***syngo* DynaCT Cardiac** *syngo* DynaCT Cardiac allows the use of proven *syngo* DynaCT 3D reconstruction for contrasted X-ray projection images of ventricles and vessels of the heart. *syngo* DynaCT Cardiac contains reconstruction algorithms for - ECG-triggered 3D acquisitions (multiple C-arm rotations, approx. 30 seconds exposure time) as well as for - untriggered 3D acquisitions (one C-arm rotation, approx. 5 seconds exposure time). ECG-triggered DynaCT acquires all projection images in the same cardiac phase. As a consequence, even areas of the heart that are subject to considerable motion can be reconstructed to a sharp DynaCT volume with negligible motion artefacts. Clinical applications currently supported by DynaCT Cardiac: Electrophysiology: - 3D visualization of the left atrium to support ablation of atrial fibrillation (segmentation of the left atrium using electrophysiology guidance, must be ordered separately) - 3D visualization of the coronary venous tree to support biventricular pacemaker implantation Structural Heart Disease: - Planning, support and follow-up for heart valve implantation or replacement through 3D visualization of the mitral and aortic valve, and coronary ostia - Planning, support and follow-up for Left Atrial Appendix closure Congenital Heart Disease: - 3D visualization of the congenital heart defects before and after interventions: There are low-dose organ programs especially developed for pediatric acquisitions available. *syngo* DynaCT Cardiac is especially suited for the planning, performance and follow-up of interventions through display of current cardiac 3D morphology directly in the cath lab or hybrid environment. The *syngo* DynaCT Cardiac Volume can also serve as a basis for magnetic navigation systems (e.g., Niobe Navigant) or can be used by electroanatomical mapping systems (CARTO, Ensite NavX) for increased precision as well as time savings (optional electrophysiology guidance Segmentation required). ***syngo* DynaCT**

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(Continued) **14455582** **syngo Valve Guide Engine**	*syngo* DynaCT is especially suited to support radiologists and neuro-radiologists during interventional procedures in the angiography suite with both endovascular and non-endovascular procedures. *syngo* DynaCT provides enhanced decision making during oncology procedures such as chemoembolization and RF-ablations. In neuroradiology, *syngo* DynaCT allows the visualization of bleedings, the ventricular system of the brain and microstent placement. With syngo DynaCT it is possible to visualize a soft tissue difference of 10 HU (Hounsfield Units) of an object 5 mm in size, or 5 HU for an object 10 mm in size, in a Thick-MPR display (measured with a CATPHAN 16 CT phantom with the CTP 515 module). Homogeneous image quality is achieved across the entire image. As a result, critical regions such as the base of the skull can be displayed with a lot fewer artifacts. DynaCT also offers: - a new reconstruction algorithm optimized for fan beam geometry - a 6sDCT Head 109kV DynaCT acquisition, reducing beam hardening artifacts and therefore improving e.g. detection of bleedings in DynaCT. - DynaCT protocols optimized for intravenous injection of contrast material, including a dedicated, integrated bolus-watching phase - faster 3D acquisition with almost all protocols showing biggest benefits in the 2x2 binning mode thanks to the new zen40HDR detector For applications in the abdomen or thorax, the larger field of view allows complete visualization of tumors, their feeding vessels and the surrounding tissue, e.g. in chemoembolizations. The larger FOV also optimally supports vascular treatments in the abdomen such as the placement of stent prostheses. The short acquisition time makes it easier for patients, especially those that are critically ill, to hold their breath during the acquisition. *syngo* Dyna3D HighSpeed – being the fastest 3D protocol on the market – enables acquisitions to be generated in less than 3 seconds. As a result, moving organs such as the lungs can be displayed with a lot fewer artifacts. In addition, ~30% of contrast material can be saved which is important esp. in procedures requiring injection of a high volume of iodine (e.g. for enhancement of the aorta). **3D Image Manipulation** In cardiology, radiology and surgery, the three-dimensional information is used for diagnosis, planning of therapy and documentation. Diagnosis and treatment can be performed in one session. This offers a significant advantage thanks to the fully-integrated workflow, for example the - Transfer of the projection angle (that has been adjusted by the user in the 3D volume) to the C-arm stand. - Realtime synchronization between reconstructed volume and C-arm position (Volume following the C-arm position) - Indication whether the angulation can be achieved at the C-arm without collision with the patient or table. Features: - Reconstruction protocols for visualization of vessels, bones, clips and coils. - The result of the reconstruction can be native or subtracted. - Modification of reconstruction area to allow zoom via reconstruction. - Visualization with shading and light source for an improved three-dimensional impression. - Link between C-arm geometry and reconstructed volume: driving the C-arm to exact projection position according to the view of the reconstructed volume and/or setting the volume to follow realtime C-arm positions.

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Part No. / Product	Description
(Continued) **14455582** **syngo Valve Guide Engine**	Image data: - Viewing of volume data from AX, CT, MR, and PET modalities. - Loading of two volume data sets simultaneously. - Multiple Layouts: single (1on1), double (2 on1) and quadruple (4on1) for MPR display. - Two displays are supported for simultaneous display of two volumes side-by-side. Image display modes: - VRT, Color VRT, MIP, MinIP, and MPR rendering. - Thin slice renderings for VRT, MIP, and MinIP. - Variable light source. - Shading effects. Volume editing: - Cut planes. - Editing of clip planes and control volumes. - ROI punching. Presets: - Series-specific bookmarks, to store and retrieve volume visualization parameters. - Global presets for series-unspecific application of volume visualization parameters. Output: - Radial ranges, including macro range definitions. - 2D and 3D measurements, measurement grid, distance measurement and annotations. - AVI format export with selectable compression format and compression ratio. - TIFF, PNG, BMP, JPEG image export. - Send to film sheet - Sending of parallel ranges results to PACS. **3D accessories** Includes the accessories required for 3D setup and calibration. ***3D Roadmap*** The operator can overlay any 3D volume or planning data, or excerpts of it, onto the live fluoro image. Via a Fade in – Fade out the degree of visibility of the overlaid information can be determined at any time This tool offers the physician real-time three dimensional guidance for more confidence. It avoids repeated injection of contrast material during fluoroscopy by overlaying a 3D vessel tree instead. The 3D roadmap is automatically updated in real-time according to any table, C-arm, zoom and SID changes. Even changes due to patient movement can be manually updated. The 3D volume can be overlaid on regular fluoro as well as on subtracted fluoro (Roadmap) or acquisition series. The overlay appears on the display so the 3D Roadmap information is available in parallel with the regular 2D images of the live display of the acquisition system. ***Workflow support for valve replacements*** Automatic segmentation of the aortic root takes place after intraoperative 3D acquisition. The anatomical markers included on the segmentation results enable determination of the optimum C-arm projection angle for improved orientation. The system automatically moves the C-arm so that it is aligned perpendicular to the aortic root without additional fluoroscopy. Various display options are available for the subsequent 3D overlay of the aortic root with the fluoro image. **Fusion functionality:** A fused CT, MR or PET image can be overlaid with live fluoroscopy in combination with 3D roadmap functionality providing information during interventional procedures that are available neither in 2D X-ray nor in 3D rotational angiography. The package includes 2D/3D Fusion as well as 3D/3D Fusion:

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(Continued) **14455582** **syngo Valve Guide Engine**	2D/3D Fusion - allows to spatially align any pre-acquired 3D volume of the patient with two 2D X-ray projections. This eases the workflow during the procedures and reduces the X-ray dose because no additional 3D acquisition is required. 3D/3D Fusion – allows to spatially align two 3D volumes from the same or different modality in such way that the anatomical structures overlay each other. Any *syngo* DynaCT or *syngo* Dyna3D image can be fused with datasets from e.g., CT, MR or PET. **Toolbox functionality:** Toolbox is a generic application to interactively mark structures of interest in a 3D volume, e.g. a *syngo* DynaCT image, using points and lines. Analogously to *syngo* 3D Roadmap, these markings are projected onto the live 2D X-ray illustrating the position of the 3D anatomical structure within the live X-ray. Included functionalities: - Overlay of any lines and dots drawn on the VRT or MPRs on live 2D image. This functionality provides an easy link between information that may only be visible in the 3D volume (VRT or MPRs) and the fluoroscopy or roadmap images. **Common functions** **Inroom control functionality** Allows for remote control of the syngo Application Software from the examination room. For this, a set of functions is offered inroom for e.g. 3D image assessment and manipulation, 3D navigation, multimodality image integration, or for actively following the steps of a pre-defined workflow.
14443019 **syngo EVAR Guidance**	The *syngo* EVAR Guidance workflow includes the following steps: **Create Vessel Tree** - Automatic detection of the aorta and the main branching vessels (such as the left and right renal arteries). Additional vessels can be added with just one click. The vessel's centerline is marked to provide an easy indication of segments' length. Bones can be removed automatically from the abdominal CT dataset. **Define landmarks** – A vessel mesh model is created to allow for automatic generation of important landmarks: - Ostia rings - for each branching vessel a ring is generated to clearly mark the vessel ostia. - Landing zone rings – corresponding to each branching vessel, landing zone rings are calculated, suggesting possible landing zone. These rings can be easily adjusted along the aorta. - For each vessel an optimal C arm angle is calculated and stored into the system memory. During the procedure, these stored positions can be easily driven to, without the use of radiation. The selection between the stored positions for the vessels is easily done via the table side control. - To allow for a flexible workflow, the segmentation results, the aortic mesh model and landmarks are saved when the patient study is closed. They are stored with the case and recalled when the patient study is opened again. Preparation of the case be done at any time before the procedure. **Overlay** – The outlines of the aortic mesh model and/or the landmarks can be overlaid onto the live fluoroscopy image, following image fusion (registration). Both 2D/3D fusion and 3D/3D fusion are possible. The fusion process can be achieved from table side without having to step back into the control room.
14432953 **Lower body radiation protection**	The lower body radiation protection can be attached to the accessory rails either on the right or on the left side of the patient positioning table. It consists of the following shielding units: - A basic unit shielding the area between accessory rails and the floor. It is flexible and can be adapted to the examiner's preferences. - One LB radiation protection pivot swivel element that can move out of the way during collisions with the tube and still retain its protective function. - Two clip-on units pointing upwards from the upper edge of the basic unit with a length of 57 cm and 27 cm.

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(Continued) **14432953** **Lower body radiation protection**	The scattered radiation shielding units can be attached to the basic unit in an overlapping and fan-shaped way to allow closed, adapted scattered radiation protection even in the lower thorax area. The maximum load of the accessory rails is 40 kg, the weight of the attached scattered radiation protection is 8 kg.
14440447 **Acc. rail module, wide tabletop**	The insert with accessory rails attached to the right and left slides over the outer edges of the patient positioning tabletop. It is locked in place through two screws on either side. The part to be inserted underneath the tabletop consists of radiolucent carbon fiber material, which avoids disturbing edges in the image. Max. load capacity of the accessory rails: 40 kg. Length of the accessory rails: 45 cm. *Ordering information that can be deleted from the final version of the offer follows:* *For wide tabletops.* *Delivered as an option only, not included in the basic configuration.* *Not in conjunction with the Surgery table.*
14440448 **Bendable anesthesia screen**	The flexible, curved anesthesia screen holder serves as a holder for sterile cloths (anesthesia screen) between head and abdominal area of the patient. With its two brackets it is attached to the accessory rails of the accessory rail or head module, which slides over the outer edges of the tabletop. Weight: 1 kg. *Ordering information that can be deleted from the final version of the offer follows:* *Depending on the tabletop used and the type of examination, the head module or one of the two accessory rail modules must be available.* *Delivered as an option only, not included in the basic configuration.*
14440460 **Arm holder (pair)**	For Artis tabletops, the two arm holders help to laterally position the arms comfortably along the patient's body. They are slid laterally underneath the mattress, level with arms, and fixed by the patient's body weight. The patient's arms can be immobilized with commercially available securing straps (not included). Two pairs of arm holders of different length and height (matching the mattress height) are supplied, that are suitable both for thick and thin mattresses. An arm holder weighs 8 kg. *Ordering information that can be deleted from the final version of the offer follows:* *Not in conjunction with the Surgery table and multi-section metal / carbon tabletop or the multi-section Surgery metal / carbon tabletop RoW.* *Already included in the following basic configurations:* *- Combination Interventional cardiology / radiology* *- Interventional radiology* *- Neuroradiology* *- Combination Interventional radiology / cardiology* *- Vascular surgery* *- Neurosurgery* *Can also be ordered as an option.*
14440474 **Body strap set**	*Ordering information that can be deleted from the final version of the offer follows:* *Not in conjunction with the multi-section Surgery metal / carbon tabletop or the multi-section Surgery metal / carbon tabletop RoW.* *Delivered as an option only, not included in the basic configuration.*

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14432950 **DICOM RIS-Modality Worklist**	**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 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. 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.
14432951 **DICOM MPPS**	Sent in MPPS: - **Total dose-area product** - **Number of exposures** - **kV** per image (DICOM Exposure Dose Sequence) - **ms** per image - **mA** per image **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 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. 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.
14434201 **OEM recording system interface**	Cable connection to the OEM measurement system for ECG triggering. Necessary requirement for ECG-triggered Dyna CT card and for ECG triggered fluoroscopy.
14455574 **Large Display (3rd party)**	Preparation for the large display. For the diagnostic color display in IPS technology, with high luminance and extended viewing angle, the gamma curve has been adapted particularly for gray scale display according to the CIE / DICOM recommendations. Video signals such as live and reference images, Sensis/recording systems, PACS, HIS/RIS, Ultrasound, ECG, IVUS, OCT, external video, endoscope, mapping systems, system and table position, system messages and dose information can be individually positioned and displayed on the Large Display. Two reference segments are available to display in parallel static reference images. Technical specification of 55" display: Display size (W x H) 121 cm x 68 cm Screen size 55 ", 139 cm Resolution: 3840 x 2160 (pixels); 8 megapixels at 4 x HD. Color depth 1.07 x 10^9 colors. Excellent brightness over the lifetime: 400 cd/m² at a contrast ratio of 1450:1. Flicker-free and distortion-free image display. **Bypass concept** In case of error, such as controller failure, the Large Display switches automatically to bypass mode and

Part No. / Product	Description
(Continued) **14455574** **Large Display (3rd party)**	emergency fluoroscopy is displayed on the Large Display. **Backup concept** The Large Display has a backup concept to ensure performance in the event of power supply failure (2 separate power supplies for the left and right sides of the Large Display). **Display mount** The display mount has to be supplied/ installed/ maintained by customer.
AXA_HOVFOLLSES **Hybrid OR Virtual Follow-up Session**	This virtual follow up consultation, up to 1 hour in length, is designed to reinforce essential clinical applications and workflow concepts following an onsite training event. Through direct communication with a clinical education specialist, there will be opportunity to review, discuss and receive recommendations on clinical practices. One hour consultation sessions will be scheduled during standard business hours, Monday through Friday. This training must be completed by the later of (12) months from purchase or install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
E93PM150UAX **Eaton 93PM-150 kW UPS**	Eaton 93PM-150/150 4-Wire UPS Electronics Cabinet: 150kW Frame cabinet with three (3) Power Modules (UPM) configured as a 150kW capacity system specifically for a medical imaging application. 480 volts input / 480 volts output, 4-Wire + Gnd. Double Conversion Topology, Unit efficiency up to 97% (up to 99% with ESS), Unit output rating @ Unity Power Factor, Input current distortion < 3% @ 100% load, Patented ABM Technology, Patented HotSync parallel firmware control, Scalable Architecture, Parallel Redundancy and Capacity capable. Onboard monitoring of UPS status via front panel display is standard. Includes single feed input with three (3) circuit breaker (BIB, MBP, MIS) integrated maintenance bypass in a 14.7" wide right-mounted sidecar. Four (4) internal min-xslot communication card bays. One (1) Power Xpert Gateway UPS Mini-Slot Card (PXGMS) included. Included Services: Start-up (7x24): PLUS One (1) year on-site labor coverage (7x24). UPS Cabinet Dimensions: 36.7"W x 42.0"D x 74.0"H UPS Cabinet Weight: 1,566 Lbs. Eaton 93PM 480Vdc Battery System: One (1) IBC-L Integrated Battery Cabinet consisting of one (1) string of 240 cells (@480Vdc), 40 Batteries, and 500A Circuit Breaker in cabinet. Full load back-up time @ 150kW of 7.1 minutes. Battery Cabinet Dimensions: 32.3"W x 42.0"D x 74.0"H Battery Cabinet Weight: 4,225 Lbs. Eaton 93PM Remote Monitoring Device: Wall-mounted display panel for monitoring the UPS status in the imaging suite when the UPS is located elsewhere in the facility. Requires Power Xpert Gateway Mini-Slot Card for interface with the 93PM UPS (included with the 93PM UPS quoted above). RMP Dimensions: 5.9"W x 0.8"D x 3.2"H RMP Weight: 0.5 Lbs. Eaton Power Xpert Gateway UPS Mini-Slot Card (PXGMS): This card can provide Web/SNMP and Modbus TCP/IP connectivity and functionality for the 93PM UPS system for the purpose of remotely monitoring the status of the UPS via an Ethernet network connection.
IECAX480V125A **IEC Main Disconnect Panel - AX/125A**	This panel incorporates several features desirable for system installations to minimize down time, protect the X-Ray Generator electronics, and to reduce operational delays after a power outage. The panel has a main circuit breaker, Q1, provides fully integrated "X-Ray ON" warning light control and a relay to reduce the room lighting during the procedure. When the main circuit breaker is turned off, all power circuits within the panel will be de-energized. Q1 provides the disconnect means and lock-out and tag-out (LOTO) the X-Ray Generator power circuit for maintenance purposes. The K2 contactor will open with any loss of power or by pressing any Emergency Power Off (EPO) pushbutton. The contactor control circuit is factory configured to automatically re-energize the X-Ray Generator upon restoration of facilities power. The control circuit may be re-configured to require the operator to

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(Continued) **IECAX480V125A** **IEC Main Disconnect Panel - AX/125A**	manually restart the equipment once the incoming power has been restored. This protects the sensitive electronic circuits of the X-Ray Generator from sags and surges that immediately follow power loss from blackouts, storms, utility reclosure operations, and out of phase automatic transfer switch operations. The SC1 cabinet is protected by an electronic circuit breaker, Q4. The control circuits for the EPOs are low voltage 24 VDC and are fully powered from within the panel. The restart functionality and EPO circuitry is controlled with a safety relay, K10. The white SAFETIES OK indicator light on the front of the panel is illuminated when none of the EPOs are pressed. When the white light is active, pressing the green START pushbutton will cause the X-Ray Generator to be energized. The green START button will illuminate, and the white SAFETIES OK light will go off. Pressing the STOP button will de-energize the system. Any EPO pressed while the system is energized will result in the immediate de-energizing of the X-Ray Generator system. If an EPO is pressed at any time, the EPO must be reset which will cause the SAFETIES OK light to activate. Then the START button will activate the X-Ray system. IMPORTANT: If building power is removed from the panel while the X-Ray system is energized, the power to the X-Ray system will be restored when building power returns without any human interaction. The X-Ray system can then be restarted normally. Additional provisions are made to integrate the “X-Ray ON” warning lights and room lighting with the X-Ray Equipment. The facility lighting panel provides 120- or 277-volt power that is controlled by contacts relays of K4 and K5 mounted in the IEC. The signal controlling the relays comes directly from the Siemens Generator/Power Cabinet. The IEC will accept signals from the generator at either 24 Volts AC or DC.
14432925 **PERISTEPPING / PERIVISION (Optional)**	Excellent image quality from the abdomen to the feet is due to the fact that adjustable parameters such as acquisition frame rate, measuring fields, position of collimator blades and semitransparent filters are stored specifically for each table position. That way the different X-ray transparencies for abdomen, legs and feet can be compensated and a consistent image quality with best possible contrast is achieved. Just one single injection of contrast media protects the health of the patient and gives the physician an instant, subtracted image display of the peripheral blood vessels. PERISTEPPING: Peripheral digital stepping angiography with only a single contrast medium injection under visual control of the bolus flow. Gantry stepping with zeego and ceiling mounted systems, table stepping with floor mounted and biplane systems. - Position-dependent variable frame rates. - Fully automatic exposure control. - Automatic storage of the collimator setting for each step. PERIVISION: Peripheral digital stepping angiography with online subtraction display in an examination procedure with only one single contrast medium injection under visual control of the bolus flow. - Only one single automatically acquired mask image for each individual position. 6. Position-dependent variable frame rates. 2. Fully automatic exposure control. Automatic storage of the collimator setting for each step
14440411 **Intercom - Comfort (Optional)**	Communication / Intercom system for communication between examination room and control room, with additional footswitch for conversation selection in the examination room. Microphone and control box on the console in the control room. With adaptive acoustic filter for background noise suppression in the examination room. Microphone in the examination room installed on the ceiling. *Ordering information that can be deleted from the final version of the offer follows:*

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(Continued) **14440411 Intercom - Comfort (Optional)**	*Intercom - Comfort replaces the old intercom system (without adaptive acoustic filter for background noise suppression).* *Delivered as an option only, not included in the basic configuration*
AS_10655939 RaySafe i2 Personal Dosimetry (Optional)	The RaySafe i2 package enables continuous improvement of working procedures in X-ray environments by providing staff with personal, real-time information about scattered X-ray dose. - The Real-Time Display enables immediate changes in working procedures in order to minimize dose - The Personal Dosimeters supply the Real-Time Display with information about each individual's personal dose - The Dose View software makes it easy to review radiation data. - The optional Dose Manager software makes it easy to report, export and archive radiation data. The RaySafe i2 system includes: - 1 x RaySafe i2 Real-Time Display - 4 x RaySafe i2 Dosimeters - 1 x Dose View software package - 1 x RaySafe i2 Cradle - 1 x RaySafe i2 Mounting Rack - Installation and a one (1) year warranty provided by Unfors **Optional Accessories** Additional RaySafe i2 Dosimeter Order No. AS**10655940** RaySafe Dose Manager software package Order No. **AS10655941** **Technical specifications :** **Dosimeter** Weight 30 g (1.06 ounces) Operational quantity Hp(10) X-ray dose range 1 µSv – 10 µSv X-ray dose resolution 1 µSv X-ray dose uncertainty 5% or 1 µSv X-ray dose rate range and linearity +/- 10% 40 µSv/h – 150 mSv/h +/- 20% 150 mSv/h – 300 mSv/h Energy dependence X-, γ-rays N40 – N100 (33keV – 84keV) N100 – N120 (84keV – 101keV) Average battery life 3 – 5 years, depending on daily use **Real-Time Display** Dimensions 30 x 25 x 6 cm (w x h x d) / 11.8 x 9.8 x 2.4 inch Weight 1.45 kg (51.15 ounces) Display 10.4 ” touch screen Resolution 640 x 480 pixels Storage All X-ray dose rate/s and accumulated dose/h that are received from dosimeters in range. The memory size accommodates f.i250 dosimeters with 50 h X-ray dose rate history each. Communication Wireless radio communication with dosimeters Ethernet 10/100 Mbit/s port for the Dose Manager connection **Dose Manager PC requirements** Operation System Windows XP or Vista System memory At least 2 GB Hard disk 40 GB with at least 15 GB available space USB 2.0 port **Dose View PC requirements** Operation System Windows XP or Vista

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(Continued) **AS_10655939** **RaySafe i2 Personal Dosimetry (Optional)**	System memory At least 1 GB USB 2.0 port