

SHIP TO:

VAMC PORTLAND
VA MEDICAL CENTER
GENERAL WAREHOUSE
3710 SW VETS. HOSP. RD
PORTLAND, OR 97239

PO#: 648-B71033

Symbia Intevo Bold

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

Qty	Part No.	Item Description
1	14422382	Symbia Intevo Bold The Symbia Intevo Bold is the latest in the Symbia Intevo family. This system integrates a 16 slice Scope Power CT gantry enabling advanced CT features SAFIRE, iMAR, IVR, Fast 3D Align and Dual Energy. It is built on SPECT/CT technology providing seamless integration of two equal modalities. The Symbia Intevo Bold has state-of-the-art SPECT and high quality 16 slice diagnostic CT, providing this system full functionality for SPECT-only, SPECT/CT, or stand-alone CT diagnostic applications in Cardiology, Oncology, Neurology, and General Nuclear Medicine.
2	14421231	Low Profile 3/8" Detectors The low profile high resolution, digital detector assembly includes a .95 cm (3/8 in.) thick NaI (TI) crystal.
1	14421234	Caudal Tilt Caudal tilt on Detector 2 allows for precise positioning of static and dynamic acquisitions.
2	07835494	Low_Energy_Hi_Res Collimator Symbia Low energy (140 keV), high resolution, parallel hole collimator
2	07835452	Medium Energy Collimator Symbia Medium energy (300 keV), parallel hole collimator
2	07835445	High Energy Collimator Symbia. High energy (364 keV) parallel hole collimator
1	14414929	IQ-SPECT IQ-SPECT is a unique ultra-fast cardiac solution option for general purpose SPECT systems that enables a selection of optimized protocols: - 4 minutes using standard dose - 8 minutes using half dose - 16 minutes using only a quarter of the dose
1	07835510	Pinhole Collimator Symbia Pinhole collimator with a 4mm aperture

Qty	Part No.	Item Description
1	05252643	<p>6MM APERTURE</p> <p>The 6 mm aperture is a high sensitivity insert for the pinhole collimator.</p>
1	14422295	<p>Symbia Productivity Pkg - Seismic</p> <p>The productivity package automates collimator exchange and quality control increasing the productivity of the Symbia Intevo and Evo camera systems.</p> <p>The Productivity Package Seismic Kit retains the collimators in the Integrated Collimator Changer in compliance with local earthquake requirements.</p>
1	08717873	<p>Symbia Collimator Cart</p> <p>The collimator cart is designed to hold extra collimators and allows collimator exchange without pivoting the bed.</p>
2	08717873	<p>Symbia Collimator Cart</p> <p>The collimator cart is designed to hold extra collimators and allows collimator exchange without pivoting the bed.</p>
1	10413528	<p>AQC Web Based Training</p> <p>AutoQC web based training is available on the Siemens training website.</p>
1	10273914	<p>AutoQC source kit</p> <p>This source kit contains includes 1 - Gd-153 line and 1 - Co-57 point source required for the automatic quality control option.</p> <p>Note: The site Radioactive Material License may need to be updated to receive this source.</p>
1	10183566	<p>Internal ECG for Symbia</p> <p>The internal ECG gating system provides ECG triggering for the nuclear subsystem for nuclear cardiology examinations. In addition, for Symbia Intevo Excel, 2, 6 and 16, and T2, T6, and T16 cameras, the internal ECG gate provides ECG triggering to the CT subsystem for CT applications that require ECG gating.</p> <p>The ECG gate is built into the Symbia patient bed and is controlled by the Symbia acquisition workplace. The leads are AHA (American standard) color coded. They connect near the head of the patient bed and travel with patient, thus never interfering with scanning.</p> <p>The ECG waveform is displayed on the touch-screen Patient Positioning Monitor.</p>
1	08418407	<p>Extra Hand Controller</p> <p>This option provides an extra hand controller for the Symbia Intevo and T series scanners.</p>
1	10119031	<p>UPS for Symbia Camera Systems</p> <p>Uninterruptible power supply option that provides 10 minutes of back up power to the SPECT gantry enabling the proper shut down in the event of a power loss. Also provides noise filtering and transient suppression.</p> <p>Specifications:5.0 KVA Input configuration: 200-240 VAC, 50/60 Hz, L6-30P Output configuration: 208 VAC, L6-30R</p>
1	05245316	<p>UPS for e.soft/c.cam (60 Hz)</p> <p>Uninterruptable power supply option that provides 10 minutes of back up power enabling the proper shut down of the system in the event of a power loss.</p>
1	08717758	<p>e.media option</p> <p>The e.media patient comfort and education package integrates high quality video and sound through the color touch screen patient positioning monitor.</p>

Qty	Part No.	Item Description
1	14415788	<p>e.media DVD Player</p> <p>The e.media patient education and comfort package plays high quality video and sound through the color patient positioning monitor via a built-in commercial DVD player. The small size and compact shape of the e.media DVD player allows convenient storage and easy access for changing media.</p>
1	14415033	<p>Planar 1/2 Time Imaging</p> <p>Planar 1/2 Time Imaging provides shortened Planar acquisition times.</p>
1	14415736	<p>Advanced 3D Features</p> <p>The Advanced 3D Features Image Fusion package includes the 3D package, the Image Fusion package, and Automatic Image Fusion functionality.</p>
1	07830909	<p>Remote Diagnostic Services</p> <p>Siemens Remote Services. A broadband VPN connection is required for full remote service functionality and optimal system uptime.</p>
1	10521454	<p>Under Floor PHS Cable</p> <p>Kit for routing the cable between patient bed and the Symbia Intevo or T series gantry under the floor.</p>
1	14422373	<p>Seismic Kit # California</p> <p>The Symbia Seismic kit anchors the Symbia gantry and bed in compliance with OSHPD in California, USA.</p>
1	10412858	<p>Symbia Hybrid US Installation</p> <p>This option includes the mechanical installation of the Symbia Intevo or T series scanner system.</p>
1	14414937	<p>Symbia.net</p> <p>Symbia.net is an economical solution for reading of SPECT and SPECT•CT studies. The system can be optionally configured with full MI processing capabilities. The Symbia.net can be configured as a client-server system by adding the Server Management option. PET functionality is available on multi-seat systems.</p>
1	14421337	<p>Organ Processing</p> <p>Processing software package that provides cardiac and other organ-based SPECT processing.</p>
1	14421329	<p>Oncology Engine Advanced</p> <p>The Oncology Engine Advanced facilitates lesion detection by enabling the visualization, volumetric analysis, and fusion of SPECT. studies as well as the automated or manual registration of images from other, independently acquired modalities (e.g., CT, MR).</p>
1	14421330	<p>Cardiology Engine 4DM</p> <p>The Cardiology Engine Corridor4DM assists in the diagnosis and quantitative assessment of coronary artery disease by enabling the visualization of SPECT studies as well as quantified perfusion assessment.</p>
1	14421335	<p>Neurology Engine Advanced</p> <p>The Neurology Engine Advanced enables the quantification of SPECT neurology examinations, including movement disorders and epilepsy.</p>
1	14421656	<p>Additional System Manuals</p> <p>Additional user manual for the above selected MI system.</p>
1	14415058	<p>Monitor, 19" LCD DICOM</p> <p>The 19" DICOM Calibrated LCD monitor is designed to meet the demanding requirements of medical imaging. The display features high contrast even under high ambient light conditions that can be encountered in nuclear medicine viewing environments. The gamma curve is exactly matched to CIE/DICOM recommendation, enhancing the ability to display both color</p>

Qty	Part No.	Item Description
		and gray scale images. Light output stability is ensured by continuous backlight control throughout the display's lifetime.
1	14421240	<p>Dedicated Reconstruction System</p> <p>This high performance workstation is a state-of-the-art 64-bit computer architecture capable of handling high resolution data without impeding workflow. This workstation is seamlessly connected to the acquisition console by allowing the user to perform advanced reconstructions from the acquisition console.</p>
1	14421656	<p>Additional System Manuals</p> <p>Additional user manual for the above selected MI system.</p>
1	MI_SPEC_INIT AL_32	<p>Initial onsite training 32 hrs</p> <p>Up to (32) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.</p>
1	MI_SPEC_FLW UP_32	<p>MI_SYMB_FOLLOWUP</p> <p>Up to (32) hours of follow-up 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.</p>
1	MI_SPEC_CTC RSTR	<p>CT Cross Trainer (Printed Self Study)</p> <p>The CT CrossTrainer Program is a printed self-study course provided and administered by MIC and is intended for (1) imaging professional. StudyModules(tm) present CT in an easy to learn, interactive format with a comprehensive scope including physical principles, hardware and software, image parameters selection, image formation, safety, contrast administration, artifact prevention, patient handling, routine and advanced imaging techniques, and an abundance of images and illustrations.</p> <ul style="list-style-type: none"> - Target audience: Any technologist seeking to learn CT imaging. Prior CT experience is not required. - Specs: 6 StudyModules, 15 hours of study time, 17 Cat A CE credits - Time limited: A 6 month term of enrollment provides an opportunity to earn the associated CE credits starting on the date the course materials are shipped. Upon expiration of enrollment, unearned credits are forfeited without refund.
2	MI_SPEC_GOV _CLS	<p>GOV'T ONLY - MI SPECT Training Class</p> <p>Tuition for (1) government attendee to attend a classroom course of choice at one of the Siemens training centers. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.</p>
1	MI_SPECT_PM	<p>MI SPECT Project Management</p> <p>A Siemens Project Manager (PM) will be the single point of contact for the implementation of your Siemen's equipment. The assigned PM will work with the customer's facilities management, architect or building contractor to assist you in ensuring that your site is ready for installation. Your PM will provide initial and final drawings and will coordinate the scheduling of the equipment, installation, and rigging, as well as the initiation of on-site clinical education.</p>

Qty	Part No.	Item Description
1	MI_S_NEUROS RT	<p>SPECT Neuro syngo Remote Trainer</p> <p>This offering is for one (1) Neuro Remote Trainer(sRT) session for up to 60 minutes on Scenium and allows up to (4) imaging professionals to participate. This virtual training experience provides you with the knowledge required to unlock the potential of the Siemens Neurology Applications including quantification of neurology examinations to assist in identifying movement disorders and epilepsy. Powered by a secure broadband Virtual Private Network (VPN) connection, syngo Remote Trainer connects to your Siemens imaging console and provides you with real-time support and training. An SRS connection must be activated to utilize syngo Remote Assist. This educational offering 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.</p>
1	4SPAS014	<p>Low Contrast CT Phantom & Holder</p>

Incidental Services for Symbia Intevo Bold on Quote Nr. 1-LOAXII Rev. 3

One complimentary biomedical tuition is included with the purchase of this system. This training must be completed before the end of the warranty period.

OPTIONS for Symbia Intevo Bold

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
1	MI_SPEC_ADD _32	Additional onsite training 32 hours Up to (32) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist if applicable. This educational offering must be completed (12) months from date of purchase order. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	MI_S_XSPECT ONS12	xSPECT Onsite Training-12hrs Up to (12) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. This training will provide you with the knowledge required to unlock the potential of the excellent image quality and quantification capabilities provided by xSPECT technology. Training will cover agenda items on the ASRT approved checklist. 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.

MI Warranty Information

Product (New Systems and "ECO" Refurbished Systems Only)	Period of Warranty ¹	Coverage	
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MI-SPECT System or MI-PET System (not including radioactive sources and consumables)	12 months	Full Warranty (parts & labor, including ALL CT tubes)	
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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.			
Straton CT tubes	Prorated to a maximum of 160,000 scan-seconds or 12 months whichever occurs first	Prorated credit given to customer against replacement cost	credit percentage = $(160,000 - \text{scan-seconds used}) / 160,000 * 100$
Dura Akron Q CT tubes	Prorated to a maximum of 120,000 scan-seconds or 12 months whichever occurs first	Prorated credit given to customer against replacement cost	credit percentage = $(120,000 - \text{scan-seconds used}) / 120,000 * 100$
All other Dura CT tubes	Prorated to a maximum of 130,000 scan-seconds or 12 months whichever occurs first	Prorated credit given to customer against replacement cost	credit percentage = $(130,000 - \text{scan-seconds used}) / 130,000 * 100$
Radioactive sources	Not covered		
Spare parts	6 months	Parts only	
Consumables	Not covered		

Note: Optional Extended Warranty Coverage can be obtained by purchase of a service agreement.

Detailed Technical Specifications

Symbia Intevo Bold

Part No. / Product	Description
<p>14422382 Symbia Intevo Bold</p>	<p>The Symbia Intevo Bold camera system consists of the following integrated features:</p> <ul style="list-style-type: none"> - Gantry - Patient Bed - Acquisition Workplace - SPECT Acquisition Features - CT Acquisition Features <p>Gantry The gantry has two Variable Angle SPECT detectors and an open design with a 70 cm (27.6 in.) patient opening. The two low profile digital SPECT detectors can be configured at 76° or 90° for cardiac applications and at 180° or numerous other configurations for all other whole body and general protocols. The unobstructed gantry base permits planar imaging of seated and standing patients and patients on wheelchairs, or on standard imaging tables, gurneys and hospital beds. Optional caudal tilt of one detector allows for optimum detector positioning of static and dynamic acquisitions. The Ultra Fast Ceramic multislice spiral CT detector rotates at 120 RPM (0.5 sec per revolution).</p> <p>The gantry supports circular and non-circular orbits. Autocontour, with infrared real-time body contouring, is a standard component which minimizes patient to collimator distance to 1.2 cm (0.45 in.) in Whole Body and SPECT non-circular orbit acquisition modes. All motorized motions of the system are controlled from hand controller which can be plugged into either side of the gantry.</p> <p>The Patient Positioning Monitor is a touch screen flat panel which can be rotated for a wide range of user access and visibility. It is used for the following functions:</p> <ul style="list-style-type: none"> - Patient positioning with window and persistence adjustment - Acquisition parameter display (elapsed time, time remaining, view number, count rate, etc.) - Camera information (detector and bed positions) - Gantry control (reconfiguration, collimator change, offset zoom, and adjusting the CT acquisition limits.) - A fully integrated source holder is provided for quick and convenient quality control. <p>Patient Bed The patient-oriented design of the imaging bed consists of 35.6 cm (14 in.) wide and 15 mm (0.6 in.) thin, carbon fiber pallet, supporting patient weights up to 227 kg (500 lbs). Minimum bed height is 53 cm (21 in.) for easy patient access. Programmable table positions for wheelchairs and gurneys minimize the transport efforts of patients and staff. Integrated rulers on each side of the patient bed allow for quick whole body set up. The bed also provides automatic,uninterrupted table feed for multi-rotation continuous CT volume scanning. The patient bed can be easily pivoted to the side for railfree access of sitting/standing patients, wheelchairs, imaging tables, gurneys and hospital beds.</p> <p>Acquisition Workplace The syngo-based high performance workstation provides a multimodality graphical user interface, keyboard and mouse. SPECT and CT acquisition, quality control, and display are integrated in a single workplace. Workflows for a wide variety of clinical protocols are included. The workplace offers customizable displays and full DICOM archiving and printing functionality.</p> <p>SPECT Acquisition Features</p> <p>SPECT Acquisition Modes</p> <ul style="list-style-type: none"> - Planar static and dynamic

Part No. / Product	Description
<p>(Continued) 14422382 Symbia Intevo Bold</p>	<ul style="list-style-type: none"> - Whole Body - SPECT - Gated SPECT - Dynamic SPECT - Whole Body SPECT <p>SPECT Features</p> <p>Workflow Features: The system combines acquisition, post-processing (optional), and display into user customizable workflows that automate many clinical routines, remembering parameters for each clinical protocol, the workflow will automatically print, archive, and distribute your results to other devices on your network.</p> <p>Quality Control: Automatic and manual motion correction features aids in the improvement of the quality of the acquired images. Besides correcting for motion, gated studies can be beat normalized and quality control images such as sinograms and linograms created to document the results.</p> <p>3D Orientation: Reorient acquired SPECT volumes interactively to achieve the desired image orientation. Cardiac and general orientations are supported. If desired, the orientation applied to one volume can be automatically applied to up to 3 additional volumes.</p> <p>Image Registration: Multiple techniques provide accurate registration of acquired images including translation and rotation in three primary planes, optional automatic registration and landmark registration. The choice of output matrix size is a standard feature.</p> <p>Reconstruction: The reconstruction engine supports up to 5 multi-isotope studies concurrently. Standard SPECT as well as wholebody, dynamic and gated cardiac volumes can be created. Advanced techniques that provide high image quality come standard with our system:</p> <ul style="list-style-type: none"> - Flash Iterative Reconstruction Flash 3D is a 3D iterative image reconstruction solution which offers the best reconstruction resolution in the market today following NEMA requirements. Flash 3D reconstruction uses a measured 3D collimator beam model in the iteration process. Correct modeling of the collimator distributes the activity over the slices for more accurate reconstruction. With Flash, the spatial resolution of the collimator is modeled to maintain the precise shape of the lesion. As a result, images are reconstructed with more counts in the correct volume, increasing image contrast. The key components behind Flash 3D technology are: <ul style="list-style-type: none"> - Ordered Subset Expectation Maximization (OSEM) reconstruction algorithm using 3D collimator modeling to increase resolution and decrease noise,while maintaining the exact shape of organs and lesions,when compared to filtered back projection reconstruction. - CT Attenuation Correction that creates very precise attenuation maps from the high quality CT data to correct for attenuation and increase reading accuracy. - Scatter Correction that uses patient specific scatter projection estimates to form a generalized dual or triple energy window method to compensate for scatter during the iterative reconstruction process. <p>CT Acquisition Features</p> <p>CT Acquisition Modes</p> <ul style="list-style-type: none"> - Topogram, scanning perspectives: anterior-posterior (ap), posterior-anterior (pa), lateral (lat) - Spiral CT, continuous volume scanning technique with uninterrupted table feed in the multi-rotation mode - Sequential CT, incremental, slice-by-slice imaging mode with no table movement during data acquisition <p>CT Features</p>

Part No. / Product	Description
<p>(Continued) 14422382 Symbia Intevo Bold</p>	<p>Fast kV: Fast kV automatically recommends the optimal tube voltage for the individual patient and clinical indication. CT system adjusts mAs when the user changes the kV in order to maintain the same CTDIVol.</p> <p>CARE Dose 4D: Care Dose 4D automatically determines the minimal x-ray dose level needed to obtain optimal image quality, for all scan modes. The initial or starting tube current for every axial slice position is determined from the topogram image. Then, during the data acquisition for each axial slice, the x-ray attenuation values are closely monitored and the tube current is adjusted, on a real time basis, to optimize the x-ray dose level for the specific organs and anatomy in the x-ray path.</p> <p>Several clinical benefits are achieved with CARE Dose 4D:</p> <ul style="list-style-type: none"> - Significant x-ray dose reduction (up to 68 %) possible for all body regions scanned compared with standard sequence or spiral scanning - Consistent, optimal image quality with the x-ray dose level unique for every patient and for every anatomical region - Thinner axial slices and/or longer scan ranges possible because of reduced tube loading - Ultra-low dose examinations for pediatric patients SureView™ – Multislice Image Reconstruction System - Excellent Image Quality and no slice broadening at any pitch – IQ is kept constant for all scan speeds, independent of the selected range and scan time. - Up to 20% dose savings in spiral mode. <p>Workstream4D 4D workflow with direct generation of axial, sagittal, coronal, or double-oblique images from standard scanning protocols. Elimination of manual reconstruction steps. Reduction of data volume up to a factor of 10, since virtually all diagnostic information is captured in 3D slices. Fast image reconstruction of up to 16 images/s in 512 matrix is provided.</p> <p>Asynchronous Recon: Asynchronous Recon allows for multiple image reconstructions and reformats, parallel to scanning. With this feature, up to eight reconstruction job requests can be loaded into a scan protocol. Immediately upon completion of the scan acquisition, these reconstruction jobs are automatically executed in the background without delaying the start of next patient examination.</p> <p>Image reconstruction: Reconstruction using raw data zoom with the possibility of freely selecting the image center either before scanning (prospectively) or retrospectively.</p> <p>Image display: CT value scale for window setting -1024 to +3071 HU. For very dense objects the CT value scale can be extended from -10240 to +30710 HU.</p> <p>Multiplanar Reconstruction (MPR) Real-time MPR for real-time reconstruction of secondary slices. Slice orientation: coronal, sagittal, irregular as well as multiplanar with SIR and Oblique. Cutlines can be determined using the reference tomogram or in sagittal reformatted images (SRI). 512 x 512 reconstruction matrix.</p>
<p>14421231 Low Profile 3/8" Detectors</p>	<p>Symbia utilizes energy independent low profile digital Foresight detectors.</p> <p>Detector assembly technical specifications:</p> <ul style="list-style-type: none"> – True rectangular FOV of 38.7 x 53.3 cm (15.25 x 21 in.) – 59 photomultiplier tubes – 53, 7.6 cm (3 in.) and 6, 5.1 cm (2 in.) diameter tubes – .95 x 59.1 x 44.5 cm (3/8 x 23 x 17.4 in.) NaI (TI) crystal material

Part No. / Product	Description
<p><i>(Continued)</i> 14421231 Low Profile 3/8" Detectors</p>	<p>The Low Profile Digital Foresight Detector features:</p> <ul style="list-style-type: none"> — Balanced performance between energy resolution and spatial resolution — One, 10-bit high-speed flash ADC per PMT — Variable PMT selection ensures high resolution for all multi-energy and multi-peak applications — Optimized dynamic digital integration time to improve high count rate capability — Individual PMT pile-up correction for improved performance at high count rates — Energy independence maintains clinical performance at all energies including multi-peak and dual isotope studies — Location independence maintains consistent spatial resolution across the field of view — Crystal variation correction for optimal uniformity and linearity across all energies <p>Single source (Co-57 or Tc-99m) tunes the detector for all energies</p>
<p>07835494 Low_Energy_Hi_Res Collimator Symbia</p>	<p>The low energy high resolution collimator has the following technical specifications:</p> <ul style="list-style-type: none"> - 148,000 hexagonal holes - Sensitivity: 202 cpm/microCurie - Resolution: 7.5mm at 10 cm - Weight: 22 kg (49 lbs)
<p>07835452 Medium Energy Collimator Symbia</p>	<p>The medium energy collimator has the following technical specifications:</p> <ul style="list-style-type: none"> - 14,000 hexagonal holes - Sensitivity: 275 cpm/microCurie - Resolution: 12.5 mm at 10 cm - Weight: 64 kg (140 lbs)
<p>07835445 High Energy Collimator Symbia.</p>	<p>The high energy collimator has the following technical specifications:</p> <ul style="list-style-type: none"> - 8,000 hexagonal holes - Sensitivity: 135 cpm/microCurie - Resolution: 13.4 mm at 10 cm - Weight: 125 kg (275 lbs) <p>Due to the weight of these collimators, it is recommended that an individual collimator cart containing only the 2 high energy collimators be utilized.</p>
<p>14414929 IQ-SPECT</p>	<p>IQ•SPECT is a unique ultra-fast cardiac solution option for general purpose SPECT systems. The foundation for IQ•SPECT relies on 3 key technological advancements:</p> <ul style="list-style-type: none"> - SMARTZOOM collimators - Cardio-centric orbit - Advanced reconstruction <p><u>SMARTZOOM collimators</u> The SMARTZOOM collimator is capable of magnifying the heart and capture up to 4 times higher sensitivity than conventional LEHR collimators.</p> <p><u>Cardio-Centric Orbit</u> An intelligent Cardio-Centric Orbit is used to maintain the heart at the center of the SMARTZOOM field of view for every view of the acquisition.</p> <p><u>Advanced Reconstruction</u> The advanced reconstruction method fully models the collimator and the camera system while performing distance-dependent isotropic resolution recovery, CT based attenuation compensation (Symbia T, and Symbia Intevo series scanners), and energy window based scatter correction.</p>

Part No. / Product	Description
<p><i>(Continued)</i> 14414929 IQ-SPECT</p>	<p>The entire IQ-SPECT solution was carefully designed to address the needs of the clinic, with a selection of optimized protocol options:</p> <ul style="list-style-type: none"> - 4 minutes using standard dose - 8 minutes using half dose - 16 minutes using only a quarter of the dose
<p>07835510 Pinhole Collimator Symbia</p>	<p>The pinhole collimator with 4 mm aperture has the following technical specifications:</p> <ul style="list-style-type: none"> - 1 round hole - Sensitivity: 123 cpm/microCurie for 99m Tc - Resolution: 6.6 mm at 10 cm - Weight: 80 kg (177 lbs) <p>SPECT imaging with a pinhole collimator is not allowed.</p> <p>The pinhole collimator occupies the upper 2 locations on a collimator cart; Therefore, only an additional 2 collimators (1 pair) can be stored on the same cart.</p>
<p>05252643 6MM APERTURE</p>	<p>The 6 mm aperture has the following technical specifications:</p> <ul style="list-style-type: none"> - Sensitivity: 271 cpm/microCurie for 99m Tc - Resolution 9.5 mm at 10 cm
<p>14422295 Symbia Productivity Pkg - Seismic</p>	<p>The productivity package includes the following features:</p> <ul style="list-style-type: none"> - Integrated Collimator Changer - Automatic Collimator Exchange - Automatic Quality Control <p>Integrated Collimator Changer</p> <p>Innovative collimator exchange system that is mounted beneath the patient bed. Saves time and effort when collimators. Holds two sets of low or medium energy collimators including SMARTZOOM collimators.</p> <p>Automatic Collimator Changer</p> <p>Fully automated changing of collimators within the integrated collimator changer. Collimator removal or exchange is initiated from the patient positioning monitor.</p> <p>Automatic Quality Control</p> <p>Automatic quality control is performed via self-shielding Gd-153 line and Co-57 point sources. The sources are housed in the patient bed and are extended automatically as part of the camera's quality control procedures. The daily, weekly, and monthly procedures are customer scheduled and performed automatically without manual intervention.</p> <p>Included is a seismic kit that includes a bar which attaches to the front of the Integrated Collimator Changer to retain the collimators in their respective drawers in the event of an earthquake.</p>
<p>08717873 Symbia Collimator Cart</p>	<p>The collimator cart is automatically clamped to the patient bed once positioned by the user. The clamping mechanism allows precise collimator exchange to occur.</p> <p>The collimator cart is designed to hold 2 sets of collimators, or 1 set in combination with a pinhole collimator.</p> <p>Due to the weight of the high energy collimators, it is recommended that an individual collimator cart containing only the 2 high energy collimators be utilized.</p>

Part No. / Product	Description
08717873 Symbia Collimator Cart	<p>The collimator cart is automatically clamped to the patient bed once positioned by the user. The clamping mechanism allows precise collimator exchange to occur.</p> <p>The collimator cart is designed to hold 2 sets of collimators, or 1 set in combination with a pinhole collimator.</p> <p>Due to the weight of the high energy collimators, it is recommended that an individual collimator cart containing only the 2 high energy collimators be utilized.</p>
10273914 AutoQC source kit	<p>The useful life of the 370 MBq (10 mCi) Gd-153 line, used for daily extrinsic floods and monthly multi-head registration procedures, is 2 years. The useful life of the 1.85 MBq (50 µCi) Co-57 point, used for intrinsic floods, is 1 year.</p> <p>Sources that have been replaced are returned to the source vendor for disposal. Return shipment costs are not included in the purchase price.</p>
08418407 Extra Hand Controller	<p>The Symbia Intevo and T series scanners come standard with a single hand controller that can be plugged into either side of the gantry. This option adds an additional hand controller for added efficiency in accessing the motorized motions for the patient bed, gantry, and detectors.</p>
05245316 UPS for e.soft/c.cam (60 Hz)	<p>Specifications:</p> <p>1.4 KVA</p> <p>Input configuration: 120 VAC, 5-15P Output configuration: 120 VAC, (6) 5-15R</p>
08717758 e.media option	<p>Hospital promotional videos, patient procedure information, relaxation videos, and music CDs are just a few examples of the material that can be experienced with e.media.</p> <p>Outside of Region 1 (United States, U.S. Territories, and Canada), the DVD player, which must be purchased locally and must meet the following minimum specifications:</p> <ul style="list-style-type: none"> - Media: DVDs and Audio CDs - Video Format: NTSC, PAL or SECAM - Audio: DVD per DVD PCM Standard - CD per Redbook Standard - Outputs: Audio L/R, Phono Jack - Power: 100-240 VAC 50/60 HZ - Power consumption: < 8 w max
14415033 Planar 1/2 Time Imaging	<p>The Planar ½ Time Imaging package is based upon a statistical, adaptive de-noising and de-blurring process for planar imaging. It can be used to:</p> <ul style="list-style-type: none"> – Shorten the acquisition time of planar imaging, and/or – Reduce the dose administered to the patient, and/or – Enhance the image quality of statistically poor imaging results
14415736 Advanced 3D Features	<p>This package supports images from NM, PET, CT, MR and AX and features the following:</p> <p>3D Package</p> <p>Basic 3D package used to navigate through volume data and to create surface shaded and maximum intensity projection images. This package supports the following features:</p>

Part No. / Product	Description
<p>(Continued) 14415736 Advanced 3D Features</p>	<ul style="list-style-type: none"> - Surface Shaded Display - Maximum Intensity Projection (MIP) - MPR user defined Thickness - Interactive 3D volume rotation - Interactive 3 slice display - Oblique cuts at any angle within the volume - Storage of fused results as DICOM secondary capture images - Region of interest punch tool - Curved cuts along any user defined pathway - Storage of 3D results <p>Image Fusion Package</p> <p>Image Fusion Package for spatial alignment, superimposition, and visualization of image data of one patient where image data has been generated by different modalities. Supports optimal diagnosis by fusing the morphological with the functional information.</p> <ul style="list-style-type: none"> - Easy-to-use visual alignment with 6 degrees of freedom (3X translation, 3X rotation) - Landmark based registration with convenient landmark editor for point-based registration using anatomical landmarks - Storage of transformation matrix after registration for later retrieval - Side by side visualization with correlated pointer and simultaneous scrolling - 2D alpha blending in monochrome or pseudo-color with adjustable balance between the two superimposed data sets. <p>Automatic Image Fusion</p> <p>Enhances the existing Image Fusion Package with techniques for automatic image registration. Surface Matching and Mutual Information algorithms allow for mix of image registration between anatomic modalities and functional modalities.</p>
<p>07830909 Remote Diagnostic Services</p>	<p>A broadband connection is required for full remote service functionality and optimal system uptime. The Siemens Remote Service option allows for remote access to your networked workstations. Hardware may need to be purchased.</p> <p>Features include:</p> <ul style="list-style-type: none"> - Image Transfer - Remote updates including Virus Protection - Error log retrieval - Remote Workflow revisions - Remote configuration - License management - Remote workstation control via netmeeting
<p>10412858 Symbia Hybrid US Installation</p>	<p>Installation includes:</p> <ul style="list-style-type: none"> - Complete system assembly - Alignment - System startup - Calibrations - Performance verification to factory specifications <p>This option is required for all US Installations</p>
<p>14414937 Symbia.net</p>	<p>Symbia.net is a clinical workplace that offers:</p> <p>System Features:</p> <ul style="list-style-type: none"> - Workflow based architecture - DICOM networking, printing

Part No. / Product	Description
<p><i>(Continued)</i> 14414937 Symbia.net</p>	<ul style="list-style-type: none"> - User configurable displays - 3D Orientation - Image Fusion <p>Access to reading capabilities from anywhere (requires Server Management option)</p> <ul style="list-style-type: none"> - Any standard PC, Mac, or iPad with a network connection can be set up as a client - Up to 10 concurrent users can access the clinical network simultaneously <p>Easy installation and operation</p> <ul style="list-style-type: none"> - Symbia.net easily integrates with existing cameras, RIS and PACS - A virtually unlimited number of client computers can be installed remotely (requires Server Management option) - Designed for the needs of nuclear medicine with a user friendly interface and advanced automation features <p>Optional Extensions</p> <ul style="list-style-type: none"> - Server Management option - Supports up to 10 concurrent users - 1 seat at the workplace - Up to 9 floating client licenses - Cardiology Engines - Oncology Engines - Neurology Engines - MI Processing Engine - Advanced SPECT/CT Reconstruction - MI Cardiac Process Engine
<p>14421337 Organ Processing</p>	<p>Cardiac Processing (Autocardiac Activity) Features</p> <ul style="list-style-type: none"> - Process up to 4 series simultaneously - Mixed Non-Gated, Gated, Profile series simultaneously Profile simultaneous AC and Non-AC Multi-Isotope support (6 per series) - Separate reconstruction parameters per series / isotope 3D Elliptical Masking - Filtered Backprojection, Iterative-W, OSEM 2D, or OSEM 3D (optional) Reconstructions - Coincidence Reconstruction - True 3D Reconstruction Zoom - Trial Mode Reconstruction - Interactive Filter Tool - Interactive Masking / Centering <p>General Reconstruction (TOMO Reconstruction Activity)</p> <ul style="list-style-type: none"> - Process up to 5 series simultaneously - Multi-Isotope support (6 per series) - Standard Tomography and Dynamic Tomography reconstructions - Separate reconstruction parameters per series / isotope - 3D Elliptical Masking - Filtered Backprojection, OSEM 2D or 3D (optional) Reconstructions - 3D Reconstruction Zoom - Trial Mode Reconstruction - Interactive Filter Tool Interactive Masking / Centering - Chang's Attenuation Correction

Part No. / Product	Description
<p>(Continued) 14421337 Organ Processing</p>	<p>Quality Control (Quality Control Activity) Features</p> <ul style="list-style-type: none"> - Sinogram, Linogram, and Summed Image - Cine with reference line - Automatic and Manual Motion Correction - Static X / Y / Copy / Paste - Dynamic X / Y / Copy / Paste - Gated Histogram Review - Tomo X / Copy / Paste - Dynamic Tomo Repeat X / Copy / Paste - Dynamic Tomo X / Copy / Paste / Repeat Rejection <p>Image Fusion</p> <ul style="list-style-type: none"> - Automatic adjustment based on pixel size - Volume translation and rotation operations - Manual, interactive volume manipulations - Manually enter desired translation and rotation parameters - Adjustable alpha blending display - Selectable viewing angles - Choice of output matrix size (64, 128, or 256) - Landmark registration technique <p><u>Organ Based Processing</u></p> <p>3D Reorientation</p> <ul style="list-style-type: none"> - Free angle reorientation of reconstructed series - Process up to 4 series simultaneously - Process 1 series to create 3 different series, each in a different plane <p>Cardiac Planar Gated Blood Pool</p> <ul style="list-style-type: none"> - Left and Right Ventricular EF Analysis - Regional EF Analysis - Automated Image Filtering - Automatic or Manual ROI determination - Functional Image Creation - Curve Analysis - Filling and Emptying Rate Analysis <p>Shunt Analysis</p> <ul style="list-style-type: none"> - Automatic Composite Creation - Curve Smoothing and Fitting Options - Integral Calculation for Patient and Shunt Curve - Shunt Qp/Qs via Area Method - Shunt Qp/Qs via Height Method <p>Lung Analysis</p> <ul style="list-style-type: none"> - Total or Segmented analysis - Perfusion Quantitation - L/R Lung Comparison - Geometric Mean Calculation - Single Lung Processing

Part No. / Product	Description
<p>(Continued) 14421337 Organ Processing</p>	<p>Thyroid Analysis</p> <ul style="list-style-type: none"> - Automatic or Manual ROI determination - Uptake, Countrate, Area and Volume Calculations - Single Lobe Processing - 6 and 24 Hour Uptake <p>Renal Analysis</p> <ul style="list-style-type: none"> - Automatic or Manual ROI Determination - Gates GFR - Oberhausen ERPF - Itoh ERPF - Oriuchi MAG3 - MAG3 without Blood Sample - Transplant - Captopril Comparison - Curve Analysis - R/L Ratio - Bubeck (TER) Processing <p>Gastric Emptying Analysis</p> <ul style="list-style-type: none"> - Automatic or Manual ROI Determination - Dual Isotope / energy window support - Geometric Mean Calculation - Curve Fitting Routines - Liquid / Solid Processing - Emptying Calculations <p>Hepatobiliary</p> <ul style="list-style-type: none"> - Automatic or Manual ROI Determination - EF Calculations - Dynamic and Static Methods supported - User Defined Interval EF Processing <p>Brain Analysis</p> <ul style="list-style-type: none"> - ROI Quantitation and Ratio Analysis - Bloodflow Analysis - Patlok Plot & Cerebral Bloodflow - Lassen Method - IMP - IMP-ARG - NIMS <p>Image Manipulation</p> <ul style="list-style-type: none"> - Series Filter - Series Arithmetic - Series Reformat - Series ROI & Curve

Part No. / Product	Description
14421329 Oncology Engine Advanced	<p>Oncologic diagnosis demands a volumetric visualization technique that provides fused anatomical and functional volumes into orthogonal planes using multiple layout views or full screen mode. This engine provides tools to evaluate and display SPECT (and independently acquired CT) images and results, enabling customized user defined formats, image reorientation in any axis, an array of color look-up tables, and filming options. Standard features include: viewing of SPECT and CT DICOM images including image fusion display for registered series; common display tools such as correlated cursors, quantitative color bar and interactive pixel value; default CT image windows; display of CT Maximum Intensity Projections (MIP); 3D Reorientation of volume data; region of interest (ROI) and volume of interest analysis and visualization.</p> <p>As MPR, MIP, SSD or VRT are different visualization modes possible with the same dataset, the user can arbitrarily switch between these modes as well as switch the actual display segment to full-screen mode. All modes can be registered and linked so the image manipulations including interactive slice browsing and image rotation are viewed in synchronization.</p> <p>The integrated editing package allows segmentation of 3D datasets either with manual contour creation, thresholding, or volume growing operations. Dataset confinement is possible either using a ClipBox or a variable editing slab. Image quality can be improved with morphological operators such as Erosion and Dilatation.</p> <p>Applications include: Volumetric Analysis and Advanced Image Fusion</p> <p>Most features of Advanced Image Fusion are provided via the syngo 3D Taskcard. This taskcard is only available from the server seat and is therefore not accessible via a client connection. However, the automatic image fusion option is also provided via the Image Registration activity which is available to all seats.</p>
14421330 Cardiology Engine 4DM	<p>The Cardiology Engine provides the Corridor4DM Cardiac Suite, a comprehensive set of quantitation programs for the evaluation of SPECT Myocardial Perfusion Imaging</p> <p>The Corridor4DM application includes comprehensive interactive processing and display, generation of 2D, 3D, and polar maps images, calculation of ventricular volumes, myocardial mass and ejection fraction for gated SPECT studies and utilizes gated bloodpool data to calculate left ventricular Ejection Fraction. Compare perfusion and functional polar maps to gender matched normal files, which includes additional support for attenuation correction. Also included are a normal database generator and the ability to create reports within the Corridor4DM application. The Corridor4DM application is an OEM product developed and supported by INVIA.</p> <p>Outputs include DICOM secondary capture files, result files, reports as well as the ability to generate an AVI or TIFF file.</p> <p>Supported software for Profile Reconstruction cardiac data</p> <p>Applications include: Corridor4DM Cardiac Suite</p>
14421335 Neurology Engine Advanced	<p>With the use of optimized workflows included in this Neurology Engine, one can combine standardized anatomy and a comprehensive normal 99Tc-ECD database with advanced fusion techniques, to enable automatic correlation of the patient's study with an average brain for quick computation of abnormalities. The fusion engine produces results that are reliable and reproducible between multiple sessions and multiple users. The superior quantification tools include voxel-by-voxel and regional evaluation of abnormal brain perfusion and automatic positioning of anatomical regions of interest which are optimized for evaluation of dementia. Additional anatomical brain regions of interest are possible which makes this application flexible to evaluate a number of neurological disorders. In addition, several anatomical regions may be selected for quick assessment of a single patient scan or for quantitative comparison to other scans Unique fusion techniques, automated evaluation steps, and comprehensive quantification tools meet the needs of the emerging SPECT or SPECT and independently acquired CT neurological evaluations. A reporting mechanism is also incorporated to help ensure consistent patient reporting.</p> <p>Scenium Striatum Analysis provides a workflow for Ioflupane brain assessment. This powerful workflow enables:</p> <p>Visual assessment is aided by combining automatic slab creation with optimal window leveling to ensure reproducible displays across patients and users.</p> <p>Quantification includes a table of results with the most relevant quantification parameters such as left/right ratios and striatum and background ratios. These calculations are made based on a pair of 3D Striatum ROIs that are</p>

Part No. / Product	Description
<p>(Continued) 14421335 Neurology Engine Advanced</p>	<p>automatically positioned on the patient scan, but can also be manipulated by the user for a perfect fit to the patient anatomy.</p> <p>Scenium Subtraction analysis provides an advanced subtraction workflow aimed primarily at epileptic seizures. This feature implements the SISCO technique (Subtraction Ictal SPECT Coregistered to MRI) for an easy and reproducible Epilepsy assessment. This powerful workflow enables both reproducible visual assessment as well as quantification.</p> <p>Applications include: syngo Scenium SPECT Database Comparison, Scenium Striatal Analysis, and Scenium Subtraction</p>
<p>14415058 Monitor, 19" LCD DICOM</p>	<p>Additional features include:</p> <ul style="list-style-type: none"> - 19" TFT panel - minimum of 170 degree horizontal and vertical viewing angle - Optimal picture resolution of 1280 x 1024 - Contrast ratio 450:1 - Maximum luminance 280 cd/m2 - Anti-glare panel surface
<p>MIS_BIOMD_CMP_T RN One complimentary biomedical tuition is included with the purchase of this system. This training must be completed before the end of the warranty period.</p>	<p>This educational offering must be completed by the later of (12) months from purchase of training or if applicable, completion of installation. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.</p>