

521-4B5002

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Quote Nr:

1-7JKO3T Rev. 0

Symbia Intevo 16

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

Qty	Part No.	Item Description
1	14421230	Symbia Intevo 16 The Symbia Intevo 16 is built on xSPECT technology, enabling true integration of SPECT and CT. With xSPECT technology the SPECT information is registered into the CT frame of reference laying the foundation for higher SPECT image resolution and accurate and reproducible quantitative results. The Symbia Intevo 16 has state-of-the-art SPECT and high quality sixteen slice diagnostic CT, providing this system full functionality for all SPECT, xSPECT, and 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	Symbia Intevo 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	08717873	Symbia Collimator Cart The collimator cart is designed to hold extra collimators and allows collimator exchange without removing the bed.
1	14421323	Symbia Intevo Productivity Package The productivity package automates collimator exchange and quality control to improve the productivity of the Symbia Intevo camera systems.
1	10413528	AQC Web Based Training AutoQC web based training is available on the Siemens training website.
1	10273917	AutoQC Source Registration Kit Source registration kit for Symbia Automatic Quality Control option. This kit contains information on updating site radioactive materials license, contact information for source vendor, and user instructions.

Qty	Part No.	Item Description
1	10273914	AutoQC source kit This source kit contains includes 1 - Gd-153 line and 1 - Co-57 point source required for the automatic quality control option.
1	14421240	Dedicated Reconstruction System The syngo-based high performance workstation utilizes a 64-bit architecture to perform advanced SPECT reconstructions in clinically useful time frames. In addition, the workplace offers customizable displays and full DICOM archiving and printing functionality. Hardware: - Two Six-Core 2.9 GHz Xeon CPU - 64 GB RAM - NVidia Q600 Graphics Card - Integrated DVD-R RW - HP Liquid Cooling System - Workflow-based Architecture
2	14415058	Monitor, 19" LCD DICOM 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 and gray scale images. Light output stability is ensured by continuous backlight control throughout the display's lifetime.
1	10183566	Internal ECG for Symbia The internal ECG gating system provides ECG triggering for the nuclear subsystem for nuclear cardiology examinations. In addition, for Symbia T2, T6, and T16 cameras, the internal ECG gate provides ECG triggering to the CT subsystem for CT applications that require ECG gating. The ECG gate is built into the Symbia patient bed and is controlled by the Symbia acquisition workplace. The leads connect near the head of the patient bed and travel with patient, thus never interfering with scanning. The ECG waveform is displayed on the touch-screen Patient Positioning Monitor.
1	10413526	PHS Extended Pivot The PHS extended pivot option extends the range of pivot for the patient bed in gurney mode.
1	08418407	Extra Hand Controller This option provides an extra hand controller for the Symbia T Series scanners.
1	14421368	Organ Processing for Symbia This upgrade will add organ processing capabilities to your acquisition workplace.
1	07830909	Remote Diagnostic Services Remote Diagnostic Services. A broadband connection is required for full remote diagnostic functionality and optimal system uptime.
1	10412858	Symbia T Series US Installation This option includes the mechanical installation of the Symbia T Series camera system.
1	14421332	Cardiology Engine Cedars The Cardiology Engine Cedars assists in the diagnosis and quantitative assessment of coronary artery disease by enabling the visualization of SPECT studies as well as quantified perfusion assessment.
1	14415033	SPECT/CT 1/2 Time Planar Imaging SPECT•CT Planar 1/2 Time Imaging provides shortened Planar acquisition times.
1	14421330	Cardiology Engine 4DM 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.
1	14415195	4 Quadrant Phantom for Symbia S / T A 4 quadrant 2.0-2.5.30.3.5 mm standard pattern slightly modified for use with the e.cam and Symbia Imaging Systems
1	10119031	UPS for SPECT Camera Systems 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. Specifications:5.0 KVA Input configuration: 200-240 VAC, 50/60 Hz, L6-30P Output configuration: 208 VAC, L6-30R

Qty	Part No.	Item Description
1	05245316	UPS for e.soft/c.cam (60 Hz) 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.
1	05245308	TVSS Surge Protection for SPECT (60 Utilizes bipolar Silicon Avancelance Diode technology Dual stage protection EMI/RFI noise filtering Remote status indication A single unit provides noise filtering and transient suppression for 60 Hz applications.
1	05245324	TVSS e.soft / c.cam (60 Hz) Utilizes bipolar Silicon Avancelance Diode technology Dual stage protection EMI/RFI noise filtering Remote status indication A single unit provides noise filtering and transient suppression (model TF-120-15P1).
1	07822989	Syngo Security Package The syngo Security Package provides enhanced security features including user management and audit trail functionality.
1	MI_SPECT_PM	MI SPECT Project Management A Siemens Project Manager (PM) will be the single point of contact for the implementation of your Siemens 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.
1	MI_SPEC_INIT AL_32	Initial onsite training 32 hrs Up to (32) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	MI_SPEC_FLW UP_32	MI_SYMB FOLLOWUP 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.
1	MI_SPEC_CTC RSTR	CT Cross Trainer (Printed Self Study) CT Cross Trainer printed self study materials for (1) imaging professional. These materials will provide the user with basic CT knowledge by testing the participant periodically. Successful completion of the self study program will provide the participant with CE credits. CT Cross Trainer printed self study materials for (1) imaging professional. These materials will provide the user with basic CT knowledge by testing the participant periodically. Successful completion of the self study program will provide the participant with CE credits. 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	MI_SPEC_ADD _24	Additional onsite training 24 hours Up to (24) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist if applicable. This educational offering must be completed (12) months from 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	4SPAS014	Low Contrast CT Phantom & Holder

OPTIONS:

Qty	Part No.	Item Description	Extended Price
1	14414929	IQ-SPECT (Rapid cardiac acquisition- currently on T6 & T16) IQ-SPECT is an innovative, high sensitivity cardiac imaging solution that allows intelligent reduction of SPECT acquisition time or injected dose for nuclear cardiology applications.	
1	14421239	xSPECT Quant Tc99m (new on intevo) Advanced SPECT reconstruction technique that allows accurate and reproducible quantitative Tc99m SPECT imaging.	
1	14421237	xSPECT Bone (new on intevo- requires xSPECT Quant above) Advanced Bone Imaging Technique that enables higher image resolution than conventional SPECT or SPECT/CT bone image reconstructions.	
1	14421242	xSPECT Quant Calibration Source (required for xSPECT Quant) This source kit contains includes a precision Co-57 point source required for calibrating the xSPECT Quant Tc99m option.	
1	14421241	xSPECT Quant Source Registration (required for xSPECT Quant) Source registration kit for Symbia Intevo Quantitative Tc99m option. This kit contains information on updating site radioactive materials license, contact information for source vendor, and user instructions.	
1	14421313	Over Floor Cable Hybrid Optional kit for routing the cable between patient bed and the Symbia Intevo gantry on top of the floor.	
1	08719341	HeartView CT & Calcium Scoring This package combines the Heartview CT option for ECG-controlled acquisition and reconstruction of artifact-free images of the heart with the Calcium Scoring application for the quantification of calcifications in CT images.	
1	08717949	syngo CARE Bolus The CARE Bolus option automatically triggers the start of a CT spiral scan when contrast media appears in sufficient density at a user defined location.	
1	14421335	Neurology Engine Advanced The Neurology Add-On enables the quantification of SPECT neurology examinations. The advanced engine aids in the quatification of movement disorders.	
1	14415081	Cedars Reporting Package The Cedars Reporting Package is a tool that can be used to automatically generate reports for myocardial perfusion studies from the Cedars QPS and QGS applications. The Cedars Reporting package is available on syngo MI Workplaces and also on the syngo MI Mobile. This software is designed to create, edit, sign and generate MI cardiac reports in .pdf format within the Cedars Quantitative Suite Applications	
1	14415068	Cedars Fusion/Coronary Overlay The Cedars Fusion/Coronary Overlay option complements Cedars SPECT, PET, or MI packages. This option provides the ability to fuse a patient's coronary vessels onto the left ventricular SPECT or PET perfusion surfaces of the heart.	
1	05231365	10mCi Rectangular Source Model IPL-FL24R Large rectangular Co-57 flood source Activity: 10 mCi (370 Mbq) Active dimensions: 24" long x 16.5" wide Overall dimensions: 26" long x 18.5" wide For use with e.cam and Symbia imaging systems. The following license requirements are required for international orders: (1) Government seal on license document (2) Address of facility on license document (3) Valid dates of license (4) Radionuclide (& activity) approved for receipt and use	

**Extended
Price**

Qty	Part No.	Item Description	
1	07835510	Pinhole Collimator Symbia Pinhole collimator with a 4mm aperture	
1	05244343	8 mm aperture The 8 mm aperture is a high sensitivity insert for the pinhole collimator.	
1	05252643	6MM APERTURE The 6 mm aperture is a high sensitivity insert for the pinhole collimator.	
2	07835528	LE_Ultra_High_Res Collimator Symbia Low energy (140 keV), ultra high resolution, parallel hole collimator	
2	07835486	Fan Beam Collimator Symbia Low energy (140 keV) fan beam collimator	
1	08717758	e.media option (plays DVDs on P-scope) The e.media patient comfort and education package integrates high quality video and sound through the color touch screen patient positioning monitor.	
1	14415788	e.media DVD Player (add to e.media above) 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.	
1	MI_SPEC_IQ_1 2	IQ SPECT Onsite Training (add this if you add IQ SPECT option) Up to (12) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.	
1	MSCT322	Stellant D Dual Ceiling w/Certegra WS New Stellant D Dual Ceiling mounted with Certegra Workstation NO Informatics, but is Informatics ready. Includes Dual Flow as standard. Includes Stellant D, Dual Head, ceiling mounted injector; Certegra workstation; installation and warranty through Medrad.	
1	ACRPHANTOM 464	464 ACR Accreditation CT Phantom	
1	M3034852	Medrad P3T 2.0 Bundle (add this if you choose the Stellant injector above) P3T 2.0 Bundle containing all PT3 Modules for the Certegra Workstation. Includes Medrad's P3T Cardiac, Abdomen and PA	

Detailed Technical Specifications

Symbia Intevo 16

Part No. / Product	Description
14421230 Symbia Intevo 16	<p>The Symbia Intevo 16 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><u>Gantry</u></p> <p>Variable Angle, open design with 70 cm (27.6 in.) patient opening. The two new low profile digital SPECT detectors can be configured at 76° or 90° for cardiac applications and at 180° for all other whole body and general protocols. 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). 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.</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.</p> <p>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.) <p>A fully integrated source holder is provided for quick and convenient quality control.</p> <p><u>Patient Bed</u></p> <p>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 rail-free access of sitting/standing patients, wheelchairs, imaging tables, gurneys and hospital beds.</p> <p><u>Acquisition Workplace</u></p> <p>The syngo-based high performance workstation provides a multi-modality graphical user interface, keyboard</p>

Part No. / Product	Description
<p>(Continued) 14421230 Symbia Intevo 16</p>	<p>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>Hardware:</p> <ul style="list-style-type: none"> - Single Quad-Core 2.54 GHz Xeon CPU - 4 GB RAM - 4 X 300 GB SAS Hard Drives - Integrated DVD-R RW - Workflow-based Architecture <p><u>SPECT Acquisition Features</u></p> <p>SPECT Acquisition Modes</p> <ul style="list-style-type: none"> - Planar static and dynamic - Whole Body - SPECT - Gated SPECT - Dynamic SPECT - Whole Body SPECT <p>SPECT Features</p> <p>Workflow Features:</p> <p>The system combines acquisition, post-processing (optional), and display into user customizable workflows that automate many of your clinical routines. Besides remembering and storing your 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:</p> <p>Use the automatic and manual motion correction features of the system to aid you in the quality of your acquired images. Besides correcting for motion, you can beat normalize your gated studies and create quality control images such as sinograms and linograms to document your results.</p> <p>3D Orientation:</p> <p>Reorient your acquired SPECT volumes interactively to achieve the desired patient position. 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:</p> <p>Multiple techniques are available for accurate registration of your acquired images. Translations and rotations in all 3 planes provide a foundation for accurate registration. The optional automatic registration technique can often assist you in those hard-to-register cases. A landmark registration feature rounds out the available techniques. Triple registration and the choice of output matrix size are also standard features.</p> <p>Reconstruction:</p> <p>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"> - <u>xSPECT Reconstruction</u> - The xSPECT ordered-subset conjugate-gradient reconstruction algorithm uses xSPECT technology to register the SPECT information into the CT frame of reference laying the foundation for higher SPECT image resolution with xSPECT Bone and accurate and reproducible quantitative results with xSPECT Quant Tc99m. - <u>Flash Iterative Reconstruction</u>

Part No. / Product	Description
<p>(Continued) 14421230 Symbia Intevo 16</p>	<p>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.</p> <ul style="list-style-type: none"> - <u>CT Attenuation Correction</u> Creates very precise attenuation maps from the high quality CT data to correct for attenuation and increase reading accuracy. - <u>Scatter Correction</u> Uses patient specific scatter projection estimates from a generalized dual-or triple energy window method to compensate for scatter during the iterative reconstruction process. <p><u>CT Acquisition Features</u></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> <p>CARE Dose 4D: This software feature provides automatic, real-time x-ray dose management for all scan modes. The minimal x-ray dose level needed to obtain optimal image quality is determined from extensive computer analysis of the Topogram image and also from the data collected during every slice scanned, on a real time basis. This dual stage automatic approach ensures optimal image quality at the lowest possible x-ray dose.</p> <p>With this method of dose control, 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 <p>SureView™ – Multislice Image Reconstruction System</p> <ul style="list-style-type: none"> - 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</p>

Part No. / Product	Description
(Continued) 14421230 Symbia Intevo 16	<p>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 multi-planar 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>Syngo 3D SSD Used to display and analyze complex anatomies – e.g. skull, pelvis, and hips – for the purpose of planning surgical interventions.</p>
14421231 Low Profile 3/8" Detectors	<p>Symbia Intevo utilizes energy independent low profile high definition digital 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 <p>The Low Profile HD 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 - Single source (Co-57 or Tc-99m) tunes the detector for all energies
07835494 Low_Energy_Hi_Res Collimator Symbia	<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)
07835452 Medium Energy Collimator Symbia	<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)

Part No. / Product	Description
07835445 High Energy Collimator Symbia.	<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>
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>
14421323 Symbia Intevo Productivity Package	<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 changing the most frequently used 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>
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>
14415058 Monitor, 19" LCD DICOM	<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

Part No. / Product	Description
(Continued) 14415058 Monitor, 19" LCD DICOM	<ul style="list-style-type: none"> - Maximum luminance 280 cd/m2 - Anti-glare panel surface
10413526 PHS Extended Pivot	The extended pivot opens the range from 40 degrees to 45 degrees to allow better handling of wide hospital beds.
08418407 Extra Hand Controller	The Symbia T series scanner comes 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.
14421368 Organ Processing for Symbia	<p>Organ processing provides generic tools for the manipulation of NM images. In addition, it provides dedicated processing protocols for the many different types of exams performed in nuclear medicine departments. Features provided are:</p> <ul style="list-style-type: none"> - Cardiac: Planar Gated Blood Pool, First Pass, Shunt - Lung: Perfusion, Ventilation, V/Q - Thyroid - Renal: GFR, ERPF, MAG3, Transplant, TER, Ace Inhibitor - Gastric - Hepatobiliary - Brain: Patlok, Lassen, IMP, IMP-ARG, NIMS - GSA Liver - Parathyroid: Scaled subtraction - Image manipulation tools: Series Filter, Series Arithmetic, Series Reformat, and Series ROI and Curve
07830909 Remote Diagnostic Services	<p>A broadband connection is required for full remote diagnostic functionality and optimal system uptime. The Remote Diagnostic Services option allows for remote access to your networked workstations. This service includes all the necessary hardware, software and configuration required to access your equipment remotely for the purposes of remote diagnostics. Features include:</p> <ul style="list-style-type: none"> - Image Transfer - Access to automatic Virus Protection updates - Error log retrieval - Remote Workflow revisions - Remote configuration - License management - Remote workstation control via netmeeting
10412858 Symbia T Series US Installation	<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>
14421332 Cardiology Engine Cedars	<p>The Cardiology Engine provides the Cedars Cardiac SPECT Suite, a comprehensive set of quantitation programs for the evaluation of SPECT Myocardial Perfusion Imaging</p> <p>The engine calculates a comprehensive set of cardiac parameters including ejection fractions, volumes, wall motion including right ventricular free wall motion in QBS, wall thickening, perfusion (%). QPS allows for the quantitation of prone SPECT data and of serial perfusion changes. Both 20 and AHA-17 segment scoring models are available. In addition to calculating an Eccentricity Index, QGS also calculates a more regional measure of LV</p>

Part No. / Product	Description
(Continued) 14421332 Cardiology Engine Cedars	<p>shape known as the Shape Index. Displays include gated slices with contours, a motion frozen display which results in better resolution and contrast by eliminating motion of the cardiac cycle, interactive 3D images, and polar maps. Manual over-ride of contours and DICOM compatible output are additional features. Outputs include DICOM secondary capture files, result files as well as the ability to generate an AVI file format. The Cedars application is an OEM product developed and supported by Cedars Sinai.</p> <p>Applications include: Cedars SPECT Suite</p>
14415033 SPECT/CT 1/2 Time Planar Imaging	<p>The SPECT•CT 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
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>
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>
07822989 Syngo Security Package	<p>Enhanced user management, including:</p> <ul style="list-style-type: none"> - user authentication to prohibit unauthorized access - privileges to define user/role based functionality - permissions to control data access <p>Audit trails to log system and data access</p>
14414929 IQ-SPECT (Optional)	<p>IQ-SPECT delivers reduced time or reduced dose cardiac SPECT acquisitions with three key components:</p> <ul style="list-style-type: none"> - SMARTZOOM collimators - Cardio-Centric Orbit - IQ-SPECT reconstruction <p><u>SMARTZOOM Collimators</u></p> <p>A SMARTZOOM collimator is designed to magnify objects in the center of the field-of-view in order to more</p>

Part No. / Product	Description
(Continued) 14414929 IQ-SPECT (Optional)	<p>efficiently exploit the large detector size of the Symbia system, while sampling regions near the edge of the FOV in order to avoid the effects of truncation. In addition, the SMARTZOOM collimator achieves this gain in counts without compromising resolution.</p> <p><u>Cardio-Centric Orbit</u></p> <p>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>IQ-SPECT Reconstruction</u></p> <p>The IQ-SPECT reconstruction method fully models the collimator and the camera system while performing distance-dependent isotropic resolution recovery, CT based attenuation compensation (Symbia T Series), and energy window based scatter correction.</p> <p>The entire IQ-SPECT solution was carefully designed to address the needs of the clinic. Collimator change, quality control, patient positioning, acquisition and reconstruction may be automated to reduce effort and complexity for the technologist. The workflow steps are simple and intuitive.</p>
14421239 xSPECT Quant Tc99m (Optional)	<p>Enabled by xSPECT technology, this revolutionary acquisition and reconstruction technique brings quantitative SPECT imaging into the reach of all clinical laboratories.</p>
14421237 xSPECT Bone (Optional)	<p>Enabled by xSPECT technology, this revolutionary reconstruction technique provides SPECT bone images with CT clarity.</p>
14421242 xSPECT Quant Calibration Source (Optional)	<p>The useful life of the 111 MBq (3.0 mCi) Co-57 point source 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>
08719341 HeartView CT & Calcium Scoring (Optional)	<p>This package provides the following features:</p> <ul style="list-style-type: none"> - Heartview CT - Calcium Scoring <p><u>Heartview CT</u></p> <p>Scanning technique and program for ECG-controlled data acquisition and image reconstruction for the Symbia T6 and T16 TruePoint SPECT•CT systems.</p> <p>This option supports prospective ECG-triggered sequence scanning and retrospective ECG-gated spiral scanning to obtain CT images of the heart in defined phases of the cardiac cycle.</p> <p>ECG-controlled imaging techniques are the basis for both the quantification of coronary calcifications (calcium scoring) and 3D reconstructions of cardiovascular anatomy. Retrospective ECG gating also allows functional imaging of the heart. Moreover, these techniques suppress pulsation or motion artifacts in the lung and in vessels close to the heart (e.g. ascending aorta).</p> <p><u>Calcium Scoring</u></p> <p>The calcium scoring application supports volumetric processing of the data and treats individual calcified lesions as 3D objects. For effective visualization, axial images are displayed together with fast, interactive MIPs. Processing is as simple as marking calcified regions visualized in the coronary arteries. The application offers the following features:</p> <ul style="list-style-type: none"> - Agatston scoring, volumetric scoring and calcium mass quantification.

Part No. / Product	Description
(Continued) 08719341 HeartView CT & Calcium Scoring (Optional)	<ul style="list-style-type: none"> - Overlapping slice compensation. - User configurable threshold for identifying coronary calcifications - Semiautomatic selection of coronary calcifications by "3D picking" functionality - User-defined assignment of lesions to one of the four arteries (LM, LAD, CX, RCA) or to other lesions or structures - 3D editing of lesions - Generation of a configurable report
08717949 syngo CARE Bolus (Optional)	<p>This option automates the start of the acquisition to ensure the optimum utilization of the contrast medium bolus in its "plateau" phase in the target anatomic volume. The system monitors user-defined regions of interest and as soon as the contrast media reaches a predefined threshold in the monitored area, a spiral scan is triggered as quickly as possible.</p>
14421335 Neurology Engine Advanced (Optional)	<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 Striatal Analysis provides a workflow for Ioflupane brain assessment. This powerful workflow enables:</p> <p>Reproducible visual assessment Visual assessment is aided by combining automatic slab creation with optimal window leveling to ensure reproducible displays across patients and users.</p> <p>Quantification 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 Striatal ROIs that are automatically positioned on the patient scan, but can also be manipulated by the user for a perfect fit to the patient anatomy.</p> <p>Applications include: syngo Scenium SPECT, and Scenium Striatal Analysis</p>
14415081 Cedars Reporting Package (Optional)	<p>The reporting package consists of (1) Automatic Report Generator (ARG) licenses & (unlimited) Q-Automatic Report Generator (QARG) licenses under one roof.</p> <p>ARG is designed to create, edit, sign and generate nuclear medicine reports from QGS and QPS quantitative results.</p> <p>The QARG application is used to define patient history, EKG collections, or create custom templates. In addition it allows the user to perform functions such as setting up Physician names, passwords, management of files and define custom configurations for manual input of data. This application is also used as a repository to edit or view existing reports. QARG can be loaded on an external PC.</p> <p>Reporting functionality is limited to QGS & QPS applications only. In order to run the QARG application from a PC, there must be a syngo MI Workplace with QARG/ARG on the same network.</p> <p>The Cedars application is an OEM product developed and supported by Cedars Sinai</p>

Part No. / Product	Description
(Continued) 14415081 Cedars Reporting Package (Optional)	Only available in English language.
14415068 Cedars Fusion/Coronary Overlay (Optional)	The Cedars Fusion/Coronary Overlay option accepts extracted coronary artery trees from the syngo Circulation Application into the Cedars application for the purposes of visually enhancing the interpretation of the myocardial perfusion exam. The Cedars application will superimpose the coronary tree onto the 3D renderings of the myocardial surface to aid in the visualization of perfusion defects.
07835510 Pinhole Collimator Symbia (Optional)	<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>
05244343 8 mm aperture (Optional)	<p>The 8 mm aperture has the following technical specifications:</p> <ul style="list-style-type: none"> - Sensitivity: 478 cpm/microCurie for 99m Tc - Resolution: 12.5 mm at 10 cm
05252643 6MM APERTURE (Optional)	<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
07835528 LE_Ultra_High_Res Collimator Symbia (Optional)	<p>The low energy, ultra high resolution collimator has the following technical specifications:</p> <ul style="list-style-type: none"> - 146,000 hexagonal holes - Sensitivity: 100 cpm/microCurie - Resolution: 6.0 mm at 10 cm - Weight: 28 kg (62 lbs)
07835486 Fan Beam Collimator Symbia (Optional)	<p>The fan beam collimator has the following technical specifications:</p> <ul style="list-style-type: none"> - 64,000 hexagonal holes - Sensitivity: 300 cpm/microCurie - Resolution: 7.3 mm at 10 cm - Weight: 28 kg (63 lbs) <p>Fan beam data will be reconstructed with filtered back-projection and can be corrected with Chang's attenuation correction. Iterative reconstruction and CT attenuation correction are not available for fan beam data.</p>
08717758 e.media option (Optional)	<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>The DVD player, which must be purchased locally outside of Region 1 (United States, U.S. Territories, and Canada), must meet the following minimum specifications:</p>

Part No. / Product	Description
(Continued) 08717758 e.media option (Optional)	<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
ACRPHANTOM464 464 ACR Accreditation CT Phantom (Optional)	<p>The ACR Accreditation CT Phantom is a solid phantom containing four modules and is constructed primarily of Solid Water a water equivalent material. Each module measures 4cm in depth and 20cm in diameter. External alignment markings are scribed and painted white to reflect alignment lights on each module thus allowing proper positioning of the phantom in the axial (z-axis), coronal (y-axis) and sagittal (x-axis) directions. The phantom has been designed to examine a broad range of CT scanner imaging parameters, including:</p> <ul style="list-style-type: none"> - Positioning accuracy - CT number accuracy - Slice width - Low contrast resolution - High contrast resolution - CT number uniformity - Image noise <p>Comes with ACR CT Phantom, phantom stand, and carrying case.</p>