NM SPECT CT, VAMC SALT LAKE CITY, UT, PO# 660-B70027

Qty	Item Description
1	**Symbia Intevo 6** The Symbia Intevo 6 is built on SPECT/CT technology, providing seamless integration of two equal modalities. The integration of state-of-the-art SPECT and high quality six slice CT gives this system full functionality for all SPECT-only, SPECT/CT, or stand-alone CT diagnostic applications in Oncology, Neurology, General Nuclear Medicine, and Cardiology.
1	**Dedicated Reconstruction System** 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.
2	**Low Profile 3/8"" Detectors** The low profile high resolution, digital detector assembly includes a .95 cm (3/8 in.) thick NaI (Tl) crystal.
1	**Caudal Tilt** Caudal tilt on Detector 2 allows for precise positioning of static and dynamic acquisitions.
2	**Low_Energy_Hi_Res Collimator Symbia** Low energy (140 keV), high resolution, parallel hole collimator
2	**Medium Energy Collimator Symbia** Medium energy (300 keV), parallel hole collimator
2	**High Energy Collimator Symbia.** High energy (364 keV) parallel hole collimator
1	**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	**Symbia Productivity Package** The productivity package automates collimator exchange and quality control, increasing the productivity of the Symbia Intevo and Evo camera systems.

Qty	Item Description

1   **Symbia Collimator Cart**

The collimator cart is designed to hold extra collimators and allows collimator exchange without pivoting the bed.

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1   **AQC Web Based Training**

AutoQC web based training is available on the Siemens training website.

1   **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.

Note: The site Radioactive Material License may need to be updated to receive this source.

1   **xSPECT Quant Tc99m**

xSPECT Quant is the first and only truly quantitative solution for Tc99m SPECT imaging. This unique advanced reconstruction technique enables absolute quantification of disease uptake that is both accurate and reproducible.

1   **xSPECT Bone Bundle**

Advanced bone imaging reconstruction software that uses the CT as the frame-of-reference for the image reconstruction enabling CT-like anatomical clarity and resolution.

1   **Internal ECG for Symbia**

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.

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.

The ECG waveform is displayed on the touch-screen Patient Positioning Monitor.

1   **Extra Hand Controller**

This option provides an extra hand controller for the Symbia Intevo and T series scanners.

1   **UPS for Symbia 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

1   **PHS Extended Pivot**

The PHS extended pivot option extends the range of pivot for the patient bed in gurney mode.

1   **e.media option**

The e.media patient comfort and education package integrates high quality video and sound through the color touch screen patient positioning monitor.

1   **e.media DVD Player**

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

Qty	Item Description
	size and compact shape of the e.media DVD player allows convenient storage and easy access for changing media.
1	**4 Quadrant Phantom**
	A 4 quadrant 2.0-2.5.30.3.5 mm standard pattern slightly modified for use with Symbia Imaging Systems
1	**Organ Processing for Symbia**
	This upgrade will add organ processing capabilities to your acquisition workplace.
1	**Planar 1/2 Time Imaging**
	Planar 1/2 Time Imaging provides shortened Planar acquisition times.
1	**Advanced 3D Features**
	The Advanced 3D FeaturesImage Fusion package includes the 3D package, the Image Fusion package, and Automatic Image Fusion functionality.
1	**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	**Co57 xSPECT Calibration Source**
	This source kit contains one 111 MBq (3.0 mCi) precision source required for calibrating the xSPECT Quant Tc99m (LEHR or LPHR) or I123 (LPHR) options.
	Note: The site Radioactive Material License may need to be updated to receive this source.
1	**Remote Diagnostic Services**
	Siemens Remote Services. A broadband VPN connection is required for full remote service functionality and optimal system uptime.
1	**Under Floor PHS Cable**
	Kit for routing the cable between patient bed and the Symbia Intevo or T series gantry under the floor.
1	**Symbia Hybrid US Installation**
	This option includes the mechanical installation of the Symbia Intevo or T series scanner system.
1	**Additional System Manuals**
	Additional user manual for the above selected MI system.
1	**Initial onsite training 32 hrs**
	Up to (32) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	**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.

Qty	Item Description

1   **CT Cross Trainer (Printed Self Study)**

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.

- 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.

1   **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.

1   **MI SPECT Project Management**

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.

1   **SPECT Cardiac syngo Remote Trainer**

This offering is for one (1) Cardiac Remote Trainer(sRT) session of up to 60 minutes on either Cedars or Corridor 4DM 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 cardiology packages from Cedars and Invia including quantification of cardiac examinations. 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.

1   **Additional onsite training 24 hours**

Up to (24) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist if applicable. This educational offering must be completed (12) months from 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   **Low Contrast CT Phantom & Holder**

One complimentary biomedical tuition is included with the purchase of this system.

Detailed Technical Specifications

Symbia Intevo 6

Description

The Symbia Intevo 6 camera system consists of the following integrated features:

- Gantry
- Patient Bed
- Acquisition Workplace
- SPECT Acquisition Features
- CT Acquisition Features

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 100 RPM (0.6 sec per revolution).

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.

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:
- 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.

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 rail-free access of sitting/standing patients, wheelchairs, imaging tables, gurneys and hospital beds.

Acquisition Workplace

The syngo-based high performance workstation provides a multi-modality 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.

Description

SPECT Acquisition Features

SPECT Acquisition Modes
- Planar static and dynamic
- Whole Body
- SPECT
- Gated SPECT
- Dynamic SPECT
- Whole Body SPECT

SPECT Features

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.

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.

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.

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.

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:

- 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:

    - 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.

CT Acquisition Features

CT Acquisition Modes

Description

- 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

CT Features

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.

Several clinical benefits are achieved with CARE Dose 4D:

- 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.

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.

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.

Image reconstruction:

Reconstruction using raw data zoom with the possibility of freely selecting the image center either before scanning (prospectively) or retrospectively.

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.

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.

Symbia utilizes energy independent low profile digital Foresight detectors.

Detector assembly technical specifications:

- 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

Description

— .95 x 59.1 x 44.5 cm (3/8 x 23 x 17.4 in.) NaI (Tl) crystal material

The Low Profile Digital Foresight Detector features:

- — 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

The low energy high resolution collimator has the following technical specifications:

- 148,000 hexagonal holes
- Sensitivity: 202 cpm/microCurie
- Resolution: 7.5mm at 10 cm
- Weight: 22 kg (49 lbs)

The medium energy collimator has the following technical specifications:

- 14,000 hexagonal holes
- Sensitivity: 275 cpm/microCurie
- Resolution: 12.5 mm at 10 cm
- Weight: 64 kg (140 lbs)

The high energy collimator has the following technical specifications:

- 8,000 hexagonal holes
- Sensitivity: 135 cpm/microCurie
- Resolution: 13.4 mm at 10 cm
- Weight: 125 kg (275 lbs)

Due to the weight of these collimators, it is recommended that an individual collimator cart containing only the 2 high energy collimators be utilized.

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:

- SMARTZOOM collimators
- Cardio-centric orbit
- Advanced reconstruction

SMARTZOOM collimators
The SMARTZOOM collimator is capable of magnifying the heart and capture up to 4 times higher sensitivity than conventional LEHR collimators.

Cardio-Centric Orbit
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.

Advanced Reconstruction
The advanced reconstruction method fully models the collimator and the camera system while performing

Description

distance-dependent isotropic resolution recovery, CT based attenuation compensation (Symbia T, and Symbia Intevo series scanners), and energy window based scatter correction.

The entire IQ-SPECT solution was carefully designed to address the needs of the clinic, with a selection of optimized protocol options:
- 4 minutes using standard dose
- 8 minutes using half dose
- 16 minutes using only a quarter of the dose

The productivity package includes the following features:
- Integrated Collimator Changer
- Automatic Collimator Exchange
- Automatic Quality Control

Integrated Collimator Changer

Innovative collimator exchange system that is mounted beneath the patient bed. Saves time and effort when changing collimators. Holds two sets of low or medium energy collimators including SMARTZOOM collimators.

Automatic Collimator Changer

Fully automated changing of collimators within the integrated collimator changer. Collimator removal or exchange is initiated from the patient positioning monitor.

Automatic Quality Control

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.

The collimator cart is automatically clamped to the patient bed once positioned by the user. The clamping mechanism allows precise collimator exchange to occur.

The collimator cart is designed to hold 2 sets of collimators, or 1 set in combination with a pinhole collimator.

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.

The collimator cart is automatically clamped to the patient bed once positioned by the user. The clamping mechanism allows precise collimator exchange to occur.

The collimator cart is designed to hold 2 sets of collimators, or 1 set in combination with a pinhole collimator.

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.

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.

Sources that have been replaced are returned to the source vendor for disposal. Return shipment costs are not included in the purchase price.

xSPECT Quant is the first and only truly quantitative solution for Tc99m SPECT imaging. This unique advanced reconstruction technique enables absolute quantification of disease uptake that is both accurate and reproducible.

Description

With xSPECT Quant quantitative values are derived automatically during the reconstruction in units of Bq/ml or SUV's. These values can be confidently compared across patients, systems and time.

xSPECT Bone is the most advanced SPECT bone imaging reconstruction software available. It uses the CT as the frame-of-reference for image reconstruction enabling CT-like anatomical clarity and resolution. xSPECT Bone defines five tissue classes: air, adipose, soft tissue, soft bone and cortical bone. Based on attenuation coefficients each image voxel in the μ-map is indexed into one of these classes. The result is a patient-specific linear zone map, which can improve image resolution. For the first time, physicians can potentially detect and distinguish between cancerous lesions and degenerative disorders and may better visualize small or low-uptake lesions thanks to a level of clarity and image detail never before experienced in nuclear medicine.

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.

The extended pivot increases the range from 33 degrees to 45 degrees to allow better handling of wide hospital beds.

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.

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:

- 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

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:
- 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
- Manual Fusion

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:

Description

- – Shorten the acqujsition time of planar imaging, and/or
- – Reduce the dose administered to the patient, and/or
- – Enhance the image quality of statistically poor imaging results

This package supports images from NM, PET, CT, MR and AX and features the following:

3D Package

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:

- 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

Image Fusion Package

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.

- 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.

Automatic Image Fusion

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.

The Cardiology Engine provides the Cedars Cardiac SPECT Suite, a comprehensive set of quantitation programs for the evaluation of SPECT Myocardial Perfusion Imaging

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 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.

Applications include: Cedars SPECT Suite

The useful life of the Co57 point sources is 1 year. Sources that have been replaced are returned to the source vendor for disposal. Return shipment costs are not included in the purchase price.

Description

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.

Features include:
- Image Transfer
- Remote updates including Virus Protection
- Error log retrieval
- Remote Workflow revisions
- Remote configuration
- License management
- Remote workstation control via netmeeting

Installation includes:
- Complete system assembly
- Alignment
- System startup
- Calibrations
- Performance verification to factory specifications

This option is required for all US Installations

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.