

Date (dd.mm.yyyy): 31.03.2022

Product description:

Symbia Evo Excel

1 Product Overview

Included products are listed below:

Item	Description	Qty	Rel
	<u>Symbia Evo Excel</u>		
1.	Symbia Evo Excel 14421682 / Country of Origin: US	1	R
2.	Low Profile 3/8" Detectors 14421231 / Country of Origin: US	2	R
3.	Caudal Tilt 14421234 / Country of Origin: US	1	R
4.	Low Energy High Res Collimator 07835494 / Country of Origin: US	2	R
5.	Collimator Cart 14421700 / Country of Origin: US	1	R
6.	External ECG w/Strip Chart - IEC 14422381 / Country of Origin: US	1	R
7.	Monitor: 19 inch LCD 14415045_Symbia / Country of Origin:	1	R
8.	UPS for Symbia Camera Systems 10119031 / Country of Origin: US	1	R
9.	Under Floor PHS Cable Evo Excel 14421634 / Country of Origin: MX	1	R
10.	Remote Diagnostic Services 07830909 / Country of Origin: US	1	R
11.	syngo.via SPECT Bundle Identifier 14456576 / Country of Origin: DE	1	R
12.	syngo.via MI Workplace SW VB60 14477240 / Country of Origin: DE	1	R

13.	syngo.via Project Identifier 14456549 / Country of Origin: DE	1	R
14.	syngo.via VB60 Documentation Check 14476566 / Country of Origin: DE	1	R
15.	Workplace/Workstation Hardware 14474714 / Country of Origin: CZ	1	R
16.	Extended Hardware Support syngo.via 14469870 / Country of Origin: DE	1	R
17.	HP Break-Fix Service for syngo.via 14469869 / Country of Origin: DE	1	R
18.	Monitor EIZO MX232W col. 2.1MP 14444874 / Country of Origin: JP	1	R
19.	Keyboard UK English 14412575 / Country of Origin: CN	1	R
20.	syngo.NM Organ Processing #1 14423745 / Country of Origin: US	1	R
21.	AppS Train Pkg syngo.via MI WP 14444969 / Country of Origin: DE	1	R
22.	Handover AppTrain NM Organ Process 14463747 / Country of Origin: DE	1	R
23.	syngo.via Modality WP Impl. Pkg. HQ 14444817 / Country of Origin: DE	1	R
24.	Travel Costs HQ 14442297 / Country of Origin: DE	1	R

T O T A L quantity is for one system

Optional products are listed below:

Item	Description	Qty	Rel
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	<u>Symbia Evo Excel</u>		
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	<u>T O T A L quantity is for one system</u>		
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2 Technical description

Item	Description
1	Symbia Evo Excel The Symbia Evo Excel has the following features: - Gantry - Patient Bed - Acquisition Workplace - SPECT Acquisition Features <u>Gantry</u> The gantry has two Variable Angle SPECT detectors and an, open design with 101.1 x 78.2 cm (39.8 x 30.8 in) patient opening. The two High Definition 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 contemporary design of the gantry incorporates Siemens-typical design elements. The gantry supports circular orbits and non-circular orbits using autocontour. Autocontour, with infrared real-time body contouring, is a standard component which minimizes patient to collimator distance to 1.2 cm (0.45 inches) in Whole Body and SPECT noncircular orbit acquisition modes. All motorized motions of the patient bed, gantry and detectors are controlled from the hand controller which can be plugged into either side of the gantry. The Patient Positioning Monitor (PPM) is a touch screen flat panel display monitor which can be rotated for a wide range 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.) - Detector and bed position information - Gantry Control (reconfiguration, collimator change, offset - Zoom <u>Patient Bed</u> The patient-oriented design of the imaging bed consists of 40 cm (15.8 inch) wide and 2.6 mm (0.102 inch) aluminum pallet, supporting patient weights up to 227 kg (500 lbs). Minimum bed

Item	Description
	height is 53.9 cm (21.2 inches) for easy patient access. Programmable table positions for wheelchairs and gurneys minimize the transport efforts of patients and staff. The patient bed can easily pivoted for rail-free access of sitting/standing patients, wheelchairs, imaging tables, gurneys and hospital beds. A fully integrated source holder is provided for quick and convenient quality control. Since patient comfort plays an important role in high quality medical imaging, the Symbia Evo Excel comes equipped with the following comfort accessories: - Head holder to support and stabilize the head during brain SPECT examinations - SPECT armrest to support upper arms and hands during SPECT examinations - Whole body armrest to support the arms and keep them within the detector field of view during whole body examinations - Set of patient support straps to help patient lie still on bed <u>Acquisition Workplace</u> The syngo-based high performance acquisition workstation provides a wide range of clinical acquisition protocols utilizing a graphical user interface, keyboard and mouse. <u>SPECT Acquisition Features</u> SPECT Acquisition Modes: - Planar static and dynamic - Whole Body - SPECT Gated SPECT - Dynamic SPECT - Whole Body SPECT 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.

Item	Description
	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. Reconstruction: The reconstruction engine can reconstruct up to 5 volumes concurrently. Standard SPECT as well as wholebody, dynamic and gated cardiac volumes can be created.
2	Low Profile 3/8" Detectors 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 .95 x 59.1 x 44.5 cm (3/8 x 23 x 17.4 in.) NaI (TI) 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
3	Caudal Tilt
4	Low Energy High Res Collimator The low energy high resolution collimator has the following technical specifications: - 148,000 hexagonal holes Sensitivity: 202 cpm/microCurie

Item	Description
	Resolution: 7.5mm at 10 cm
	Weight: 22 kg (49 lbs)
5	Collimator Cart 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.
6	External ECG w/Strip Chart - IEC
7	Monitor: 19 inch LCD The Monitor: 19 in. LCD technical features are: - 19" active display - Optimal picture resolution of 1280 x 1024 - Anti-glare panel surface - Up to 170 degree viewing angle
8	UPS for Symbia Camera Systems
9	Under Floor PHS Cable Evo Excel This option does not include the cost of any room modifications for sub-floor installation of the cable.
10	Remote Diagnostic Services A broadband connection is required for full remote service functionality and optimal system uptime. The Smart 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

Item	Description
	License management
	Remote workstation control via netmeeting
11	syngo.via SPECT Bundle Identifier
12	syngo.via MI Workplace SW VB60 <i>syngo. via MI Workplace</i> provides one graphical user interface to prepare and read MI Images. General functions, including: - Browser functionality for fast patient and data access - Case navigator for easy and fast case navigation - Automatic image processing - Loading and displaying images of images in user-specific layouts, multiple layouts for 2D, 3D diagnosis - Ad Hoc workflow change for flexible application handling - Scrolling through images (for example, movie mode, fast mouse scrolling, synchronized scrolling) - Mirror, rotate, invert, windowing, pan/zoom, annotations, distance and angle measurement, pixel lens, and ROI/VOI evaluation - Timecurve evaluation - Findings navigator - create, collect, navigate and present findings quickly - Correlated cursor - Series synchronization for pan/zoom, windowing, LUT, scrolling - User-defined context menu - Snapshot images as secondary capture - Movie export Integrated 3D tools, such as: - All reformats immediately available: VRT, MIP, MIP thin, MinIP, MPR thin / thick, interactive slice thickness change - VRT Punch, VRT Gallery Clip plane and clip box - Table removal

Item	Description
	Bone removal for fast segmentation and removal of bony structures MPR/MPR Fusion and registration Parallel, curved & radial ranges 2D & 3D reference lines, 3D reference point Region growing for interactive segmentation of anatomical structures Anatomic intelligence: - Automatic spine labeling Automatic rib labeling for CT thorax scans Automatic landmark registration for accurate anatomical alignment of multiple time point cases More functionality, including: - Query/retrieve from DICOM nodes Exporting images and creating patient media Filming (DICOM print) or postscript printing functionality Prerequisites for all service-related issues: - Availability of a customer administrator that performs dedicated administration and support tasks (like 1st-line support, data security, backup) Minimum permanent broadband Internet connection bandwidth for uncompromised service support of 2,000 kBit/s downstream and 512 kBit/s upstream. Otherwise, certain support services may not be provided and the agreed remote response time cannot be guaranteed. <u>Specification of minimum broadband Internet connection in detail:</u> - Downstream: 2000 kBit/s for Software update, IT- and Application support (Siemens Remote Service - SRS) <u>Upstream:</u> 512 kBit/s for Application support (SRS) <u>Upstream:</u> 256 kBit/s for Software update and IT support (SRS) Scope of delivery: - DVDs with <i>syngo .via</i> software - VB60 (software license for one <i>syngo .via</i> client user)
13	syngo.via Project Identifier

Item	Description
14	syngo.via VB60 Documentation Check
15	Workplace/Workstation Hardware Brief description Type: Hewlett Packard server-based workstation Operating System: Windows Server 2019 Standard Processor: 1x CPU Xeon Gold RAM: 96GB System and Database Disk: SSD RAID 1 Image and Backup: HDD RAID 5 Gross Image Storage: approximately 1700GB Optical drive: CD/DVD-RW Graphical Processing Unit: NVIDIA Quadro RTX Mouse: USB Optical Scroll Mouse Included accessory: USB Standard international keyboard Recommended Environment Requirements A 100 Mbit/s (minimum) / 1 Gbit/s (recommended) network environment is needed for optimal performance. For remote access a 6 Mbit/s (minimum) / 10 Mbit/s (recommended) broad-band connection is required. Technical details are subject to change without notice!
16	Extended Hardware Support syngo.via Tailored firmware and driver updates to keep your hardware system up-to-date: Hardware maintenance includes the provision of latest BIOS-, firmware and driver update packages to keep the hardware system up to date. Required patches and updates are provided remotely to be installed conveniently during the next application maintenance or service window by the responsible IT system administrator. Efficient Software and Hardware incident/problem management: To ensure the performance of the tightly integrated clinical applications and HPE Hardware system in your clinical environment, Siemens and HPE have named a team of experts as a

Item	Description
	defined task force for this customized solution.
17	HP Break-Fix Service for syngo.via For issues that cannot be resolved remotely, an authorized HPE Services representative will be sent on-site, repairing or replacing components or entire units and return your system to operational condition. Furthermore, protection of sensitive data is provided. The feature “defective media retention” protects sensitive data by keeping the defective disk within your hospital campus.
18	Monitor EIZO MX232W col. 2.1MP Brief description Size: 23” Brightness: 300 cd/m² Contrast ratio: 1000:1 DICOM calibration: with bundled RadiCS LE quality control After-sales service: 3 years swap service Due to country-specific regulations, the monitor will be shipped without a power cable. The power cable will need to be sourced locally.
19	Keyboard UK English
20	syngo.NM Organ Processing #1 The syngo.NM Organ Processing Engine equips the user with the tools they need to process, quantify and interpret General Nuclear Medicine images. The display features of syngo.via have been optimized specifically for reading the varying data types present in Nuclear Medicine examinations. Based upon the exam type and the data present, an appropriate layout for the images is selected. A suite of additional layouts optimized for Nuclear Medicine is also provided to assist in the reading process. The syngo.NM Organ Processing Engine allows for the following quality control activity and organ based processing. Quality Control Activity - Sinogram, Linogram, and Summed Image - Cine with reference line - Automatic and Manual Motion Correction - Static X / Y / Copy / Paste

Item	Description
	- Dynamic X / Y / Copy / Paste
	- Gated Histogram Review
	- Tomo X / Copy / Paste
	- Dynamic Tomo Repeat X / Copy / PasteDynamic Tomo X / Copy / Paste / Repeat Rejection
	Organ Based Processing
	Cardiac Planar Gated Blood Pool
	- 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
	Lung Analysis
	- Total or Segmented analysis
	- Perfusion Quantitation
	- L/R Lung Comparison
	- Geometric Mean Calculation
	- Single Lung Processing
	Thyroid Analysis
	- Automatic or Manual ROI determination
	- Uptake, Countrate, Area and Volume Calculations
	- Single Lobe Processing
	- 6 and 24 Hour Uptake
	Renal Analysis
	- Automatic or Manual ROI Determination

Item	Description
	- Gates GFR
	- Oberhausen ERPF
	- Itoh ERPF
	- Oriuchi MAG3
	- MAG3 without Blood Sample
	- Transplant
	- Captopril Comparison
	- Curve Analysis
	- R/L Ratio
	- Bubeck (TER) Processing
	- T1/2 Extrapolation
	Gastric Analysis
	- Automatic or Manual ROI Determination
	- Dual Isotope / energy window support
	- Geometric Mean Calculation
	- Curve Fitting Routines
	- Liquid / Solid Processing
	- Retention Calculations
	- Emptying Calculations
	Hepatobiliary
	- Automatic or Manual ROI Determination
	- EF Calculations
	- Dynamic and Static Methods supported
	- User Defined Interval EF Processing
	Image Manipulation
	- Series Filter

Item	Description
	- Series Arithmetic - Series Reformat - Series ROI & Curve
21	AppS Train Pkg syngo.via MI WP <u>Application Training includes:</u> <i>syngo</i>. via Standard User functionality training: - Patient Navigation, data handling - User Interface, mouse concept handling - Standard Reading Functionality Application Training on one <i>syngo</i> .via MI Engine (e.g. Oncology Engine). Clinical customization: - Adjustment of system functions and workflow setting parameters within the User Interface (Prefetching, Worklists, Layouts, Monitor settings on the clients) - Definition of assignment rules based on RIS examinations and/or modality scan protocols to their corresponding <i>syngo</i> .via workflows - Adjustment of default basic reporting The Siemens Application Specialist will support the clinical integration of the <i>syngo</i> .via MI Workplace. The Clinical Administrator will be trained on the customization of additional scanners or modalities and on the assignment of site-specific workflows. Thus the initial training is focused on one (1) Clinical Administrator and two (2) nominated Clinical Users. The customer has to provide the names of the Clinical Administrator and the Clinical Users to be trained, and ensure availability for training on the agreed training dates. Before the application training, the Siemens Implementation Engineer will take care of the IT related system implementation which includes: - Implementation DICOM Modality Worklist from RIS - Configuration of archiving rules - Configuration result transfer from Findings Navigator & Report into PACS and/or RIS - Configuration of Network nodes between modality, <i>syngo</i> .via, PACS, RIS, printer etc. - Configuration of Short-term storage, e.g. fill level for auto deletion

Item	Description
	- Auto-Deletion, Auto-Archiving, Auto-Routing Installation of clients, where applicable, and setup of user groups and roles
22	Handover AppTrain NM Organ Process Brief description The objective of this continuous Education Plan is to give the participants the necessary theoretical knowledge and practical experience to routinely operate the <i>syngo</i> .via system, and to become acquainted with the advanced multimodality clinical applications over the subscription term. Among other methodologies; lectures, interactive practical exercises and e-Learnings will familiarize the participants with the functionality of <i>syngo</i> .via and the clinical case-specific applications. Clinical Administrators will be trained as well in relevant clinical settings and configuration of the system. The customer has to provide the names of the Clinical Administrator and the Clinical Users to be trained, and ensure availability for training on the agreed training dates. The Education Plan includes: Pre-Training clarification: Prior to the training, an analysis of the hospital/department workflow will be performed together with the nominated Clinical Administrator, resulting in a training outline tailored to your needs. The training sessions will be performed subsequently over the contracted subscription term. <i>syngo</i> .via Advanced Visualization application training, based on country regulatory application availability: - <i>syngo</i>.SPECT Processing Engine <i>MI Reading</i> <i>SPECT Organ Processing</i> Clinical customization: - Adjustment of system functions and workflow setting parameters within the User Interface (Prefetching, Worklists, Layouts, Monitor settings on the clients) - Definition of assignment rules based on RIS examinations and/or modality scan protocols to their corresponding <i>syngo</i> .via workflows - Adjustment of default basic reporting The Siemens Application Specialist will support the clinical integration of the <i>syngo</i> .via into the institution clinical workflow.

Item	Description
	Delta training: Siemens will provide education means and training sessions for keeping up-to-date users' knowledge and competences along with <i>syngo</i> .via product lifecycle in case relevant subscription contract is available (version upgrades). The Clinical Administrator will also be trained on the customization of additional scanners or modalities and on the assignment of site-specific workflows. Application training hours per day can vary depending on country regulation. Effort or financial value recommended for Handover AppTrain SPECT Nuc Med packages is 1 days in total. This package is designed to suit the needs of training for 1-2 users, or one group. In case of multiple user groups are need to be trained for the first year, increase training effort respectively. Before the application training, the Siemens Implementation Engineer will take care of the IT related system implementation which includes: - Implementation DICOM Modality Worklist from RIS - Configuration of archiving rules - Configuration result transfer from Findings Navigator & Report into PACS and/or RIS - Configuration of Network nodes between modality, <i>syngo</i> .via, PACS, RIS, printer etc. - Configuration of Short-term storage, e.g. fill level for auto deletion - Auto-Deletion, Auto-Archiving, Auto-Routing Installation of clients, where applicable, and setup of user groups and roles
23	<i>syngo</i>.via Modality WP Impl. Pkg. HQ The Implementation Package includes the following tasks for <i>syngo</i> .via Modality Workplace (called <i>syngo</i> .via Modality Workplace): - Basic hardware installation and network integration, including up to one <i>syngo</i> .via client (does not apply for <i>syngo</i> .via MI Workplace for SPECT) Activation of Siemens Remote Services connections Import of all <i>syngo</i> .via server license files - Basic clinical configuration and integration of up to 3 DICOM nodes in <i>syngo</i> .via Modality Workplace (modality scanner and one PACS and one DICOM printer). All nodes need to be validated for connection with <i>syngo</i> .via. - Configuration of basic workflow rules

Item	Description
	Acceptance Test in cooperation with the customer Context of the implementation tasks: - The DICOM conformance of the DICOM nodes is a prerequisite for connection to <i>syngo</i> .via. The DICOM nodes to be connected to <i>syngo</i> .via Modality Workplace must be configured and tested by the customer. If necessary, the customer orders these services from the DICOM node's vendor. The configuration of the customer's Local Area Network is performed by the customer. Provision of a minimum broadband Internet connection bandwidth with 2000 kBit/s downstream and 256 kBit/s upstream for Siemens Remote Services (SRS) by the customer. If the customer does not provide SRS connectivity, then additional professional services for implementation without SRS support are offered. For service support after implementation the following minimum specification has to be provided: Downstream 2000 kBit/s (for Software update, IT- and Application support); <u>Upstream</u> 512 kBit/s (for Application support); <u>Upstream</u> 256 kBit/s (for Software update and IT support). The customer provides information, such as: IP addresses of the <i>syngo</i> .via Modality Workplace for its network integration and the DICOM nodes identifiers. The customer provides the required power supply and the installation location for the server hardware, as well as the required LAN capacity. For the LAN capacity between <i>syngo</i> .via Modality Workplace and the PACS/ modality systems a min. of 1 Gbit/sec is required. Between <i>syngo</i> .via clients and server a min of 100 Mbit/ sec is required. Presence and support of the customer's administrators (clinical and IT administrator) are required during implementation. In preparation for implementation support, the customer's administrators have completed the <i>syngo</i> .via web-based trainings, which are part of the scope of delivery. A list of applications and systems with validated connectivity to <i>syngo</i> .via Modality Workplace can be requested from your Siemens Sales Representative. If a DICOM node or another system has not been validated yet for connection to <i>syngo</i> .via by Siemens, then the customer will give his acceptance though there could be a narrowed functionality of the connection. Project coordination is performed by Siemens. Please see the <i>syngo</i> .via Data Sheet for system requirements and detailed description of implementation tasks. The hardware installation service includes the following tasks: - Unwrapping, consolidation of all packaging material and notification to the customer that the materials are ready for removal. Mechanical and electrical connections at site of operation Connection to the power supply, to Uninterruptable Power Supply (if applicable)

Item	Description
	Startup of operating system; check status of patches, drivers, service packs and hot fixes, etc. Connection and network configuration of the server and the remote service board to the LAN Configuration of remote service board (network settings, users configuration) if supported by the server Test monitor setup (if applicable) and handover of the readily installed system to the customer. For the HW installation the customer provides: - Access to the location and space for server operation Electrical power LAN access and LAN configuration Configuration of the broadband internet access for Siemens Remote Services IT Administrator's coordination and support for the mechanical and IT installation. Server and monitor(s) are at the site of operation. The customer's monitors are accompanied by appropriate cables. The connection of one or two monitors to a <i>syngo</i> .via Modality Workplace does not include monitor calibration. - For a <i>syngo</i> .via Modality Workplace depending on local legal regulations, the monitor installation described here may allow viewing only.
24	Travel Costs HQ