

REQUESTING SERVICE: ACQUISITION & MATERIEL MGMT(90)

DEL. TO: PET SUITE

SHIP TO:

WAREHOUSE/RM51-BU B80034

V.A. Medical Center

3495 BAILEY AVE

BUFFALO, NY 14215

P.O.# 528-B80034

VA Western New York Healthcare System at

Buffalo

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Buffalo NY 14215-1129

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Item No.	Qty	Description
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DISCOVERY MI 15CM

Discovery MI is the next evolution in whole body PET/CT platform, bringing clinically-relevant innovations in an evolutionary platform designed to open doors to new and advanced procedure possibilities in a non-invasive diagnostic imaging.

Many of the subsystems have been reimagined to bring advances in quantitative PET imaging, single PET/CT organ imaging, managing patient breathing and cardiac movement, PET and CT iterative reconstruction technologies, and workflow efficiency, while providing the highest PET sensitivity in the industry.

Discovery MI platform introduces new SiPM based PET detector, designed for optimal detection efficiency and clinical versatility. The new SiPM based PET detector sensitivity and NECR properties are optimized to perform with any PET tracer currently available for improved PET/CT imaging thus potentially allowing faster acquisition time and/or lower injected PET dose.

The Discovery MI 3ring consists of an integrated gantry containing:

- o a Revolution Evo CT
- o new SiPM based PET detector composed of 3 PET rings
- o a scalable PET iterative reconstruction system
- o a Discovery MI operator console featuring in standard, the following advanced workflow solutions: RadRx patient study

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		<p>prescription; Q.Check a PET data Quantitative integrity check.</p> <ul style="list-style-type: none"> <li>o a patient imaging table with one head holder, patient security straps and comfort accessories.</li> </ul> <p>Quantitative Imaging</p> <ul style="list-style-type: none"> <li>o Q.Temp – Individual temperature sensor and gain adjustment technique</li> <li>o Q.Check – User configurable data integrity check that can help ensure parameters important for quantitative imaging are saved in the patient DICOM data prior to being sent to the network for analysis and/or archiving.</li> <li>o Q.Prepare</li> </ul> <p>Prospective Reconstruction</p> <ul style="list-style-type: none"> <li>o VUE Point HD utilizes a fully 3D iterative reconstruction technique with all corrections within the loop, enhanced resolution with detector geometry modeling, model-based 3D scatter correction inside and scatter estimation outside the field of view, exclusive randoms corrections based on singles and dead-time correction with pile-up estimates providing high image quality and patient throughput.</li> <li>o VUE Point FX, time-of-flight image reconstruction, leverages the innovative VUE Point HD iterative process by adding timing information to each step within the iterative loop and improving signal-to-noise ratio</li> <li>o WideView - PET reconstructed transaxial Field of View coverage of 70cm diameter with CT based PET attenuation correction and CT wide-FOV Display.</li> </ul> <p>Motion Management</p> <p>Motion Management tools enable the reduction of motion artifacts caused by patient breathing and cardiac movement by acquiring motion information during the scan and incorporating it into motion related PET/CT applications.</p> <ul style="list-style-type: none"> <li>o RAD Rx Variable CT protocols within same exam including Average Cine CT for improved attenuation correction</li> </ul> <p>Calibration and Daily Quality Control</p> <p>Daily Quality Assurance at the start of the scanning day is quick and efficient. A simple protocol launches the DQA procedure, which takes less than 10 minutes and provides you with a daily report. (2)</p> <p>CT Key Features</p> <p>The Discovery MI platform can be operated as a standalone CT</p>

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scanner (without gantry tilt). It offers exceptional power, remarkable speed, high-resolution/low-dose imaging, and full diagnostic capabilities.

The Discovery MI includes the Revolution Evo CT that can perform a wide variety of clinical applications not requiring gantry tilt with Clarity Imaging Chain and ASiR-V(1)† capabilities.

- o Clarity Imaging Chain consists of Clarity Detector, DAS, Performix\*40 Plus X-ray Tube and ASiR-V reconstruction (option), to deliver high resolution imaging.

- o Silent design of Revolution EVO gantry allows significant reduction of audible noise compared with previous GE technology.

- o IQ Enhance (IQE) reconstruction reduces helical Artifact Index in thin slice helical scanning.

- o Axial or helical scans of the same anatomy at two different X-ray energies (kVps). To further improve registration accuracy, patient immobilization may be utilized.

- o Adaptive Enhance Level Adjustment (AELA) may improve visual spatial resolution while maintaining pixel noise standard deviation and artifact.

- o Organ Dose Modulation provides reduction of radiation dose via X-ray tube current modulation for superficial tissues, such as breasts.

- o AutomA/SmartmA\* modulates X-ray tube mA to account for specific patient anatomy based upon data gathered from the scout image.

- o Dynamic Z-axis tracking provides automatic and continuous correction of the x-ray beam shape to block unused x-ray at the beginning and end of a helical scan to reduce unnecessary radiation.

- o One stop scanning mode that provides a streamlined workflow

- o Direct MPR with Auto-Batch feature, affording automatic real-time direct reconstruction and transfer of fully corrected multi-planar images, also allows users to move from routine 2D review to prospective 3D image review of axial, sagittal, coronal, and oblique planes while enabling automated protocol-driven batch reformats to be created and networked to their desired

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reading location.

- o Dose Check provides users with tools to help them manage CT dose in clinical practice and is based on the standard XR-25-2010 published by The Association of Electrical and Medical Imaging Equipment Manufacturers (NEMA).

- o Dose Reporting: CTDIvol, DLP, Dose Efficiency displays during scan prescription and provides dose information. The CTDIvol, DLP, and Phantom size used to calculate dose is automatically saved once the user selects End Exam. DICOM Structured Dose Report generates a CT Dose Report, which can enable tracking of dose (CTDIvol and DLP) for the patient by the hospital radiation tracking system/RIS/HIS.

- o Scan mode: Helical Scan Speeds: Full 360 rotational scans: 0.35, 0.375, 0.40, 0.425, 0.45, 0.475, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0 second Helical Pitch (nominal): 0.516 to 1.531 Cardiac Pitch: 0.16 to 0.325 Selectable kV: 80, 100, 120, 140

Selectable mA: 10 to 560, 5mA increments Reconstruction Algorithms: Soft Tissue, Standard, Detail, Chest, Bone, Bone Plus, Lung, Ultra, Edge, Edge Plus

- o Scan Mode: Axial & Cine Scan Speeds: 0.35, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, and 2.0 second full scans(360 acquisition).

- o Selectable kV: 80, 100, 120, 140 Selectable mA: 10 to 560, 5mA increments Scan Plane

- o Reconstruction Algorithms: Soft Tissue, Standard, Detail, Chest, Bone, Bone Plus, Lung, Ultra, Edge, Edge Plus Image Quality 0.28mm high resolution

PET/CT Operators Console

- o Fully integrated PET and CT user interface

- o Direct Multi Planar Reformat delivers automated axial, sagittal, and coronal reconstruction with excellent image quality for PET and CT images of the patient data being acquired. Direct3D™ automatically builds 3D models during axial image reconstruction.

- o Volume Viewer: Environment for 3D processing of any CT, MR, 3D X-ray, and Pet/CT dataset. It provides exceptional tools for analysis, segmentation, measurements, annotation, filming, and exporting of clinically relevant images. Volume Viewer

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		<p>seamlessly combines anatomical image review with PET quantitative measurement capabilities such as SUV.</p> <ul style="list-style-type: none"> <li>o Freedom Workspace: Innovative hardware and software creates a convenient, ergonomic working environment. It offers sit/stand and horizontal/vertical monitor flexibility. It can also help reduce noise and heat with remote location of the console.</li> <li>o Two 19 -inch diagonal width high-resolution color monitors for image display, analysis, processing, and management of PET, CT, and PET/CT images.</li> <li>o Three button mouse with mouse pad</li> <li>o ImageWorks™ provides instant access to advanced image processing features such as CT Perfusion 4, Advanced Vessel Analysis, CardIQ Xpress Pro or Plus, AutoBone and DentaScan</li> </ul> <p>PET/CT Service Features</p> <p>Each system is supported by GE's InSite™ remote diagnostics, iLinq™, and TiP Virtual Assist.</p> <p>InSite broadband – all hardware and software required to remotely connect this PET/CT system to GE's InSite On-Line Center via secure VPN high-speed Internet connections. Enables access to services designed to reduce downtime, improve quality, enhance performance, increase productivity, and expand imaging capabilities.</p> <p>* Trademark of General Electric Company.</p> <p>‡ Optional</p> <p>(1) In clinical practice, the use of ASiR-V may reduce CT patient dose depending on the clinical task, patient size, anatomical location, and clinical practice. A consultation with a radiologist and a physicist should be made to determine the appropriate dose to obtain diagnostic image quality for the particular clinical task. Low Contrast Detectability (LCD), Image Noise, Spatial Resolution and Artifact were assessed using reference factory protocols comparing ASiR-V and FBP. The LCD measured in 0.625 mm slices and tested for both head and body modes using the MITA CT IQ Phantom (CCT183, The Phantom Laboratory), using model observer method.</p> <p>(2) Represents typical system performance</p>
3	1	Q.Clear option

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		<p>Q.Clear is a full convergence iterative reconstruction technology designed to provide up to 2 times improvement in PET quantitation accuracy (SUVmean) with up to 2 times improvement in image quality (SNR) enabling accurate small lesion detection, fast and efficient reading and more confident diagnosis.</p> <p>Q.Clear upgrade for Discovery MI - DR products Pre-requisites:</p> <ul style="list-style-type: none"> <li>o P5051SK SharpIR</li> </ul> <p>Q.Clear upgrade for Discovery 710 products Pre-requisites:</p> <ul style="list-style-type: none"> <li>o P5051SK SharpIR</li> <li>o P5051NL Q.Core + 1</li> <li>o P5051NN Q.Core + 2</li> </ul> <p>Q.Clear Upgrade for Discovery 610 products Pre-requisites:</p> <ul style="list-style-type: none"> <li>o P5051SK SharpIR</li> <li>o P5051NL Q.Core + 1</li> </ul>
4	1	<p>Q.AC option</p> <p>Q.AC</p> <p>Available on Discovery IQ, Discovery PETCT 710, and Discovery PETCT 610</p> <p>Part of Q.Suite - a suite of innovative new quantitative imaging tools from GE Healthcare designed to help clinicians generate more consistent PET measurements, and therefore assess treatment response more accurately than ever before.</p> <p>Q.AC - Accurate attenuation correction</p>

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		<p>is required for quantitative PET imaging. But in large anatomy imaging at low doses, the CT beam may not be strong enough to fully penetrate through the patient to the detector, potentially resulting in variations in attenuation measurements. Our next generation Q.AC algorithm is designed to reduce potential variance, helping to ensure that the attenuation coefficients used in image reconstruction are accurate. This may improve consistency even in the most clinically demanding circumstances.</p>
5	1	<p>SmartMAR (Metal Artifact Reduction) for Discovery MI DR</p> <p>Metal Artifact reduction (MAR) helps reduce photon starvation, beam hardening and streak artifacts caused by high Z materials in the body, such as hip implants. The clarity of MAR images is addressing the challenges posed by metal artifacts, helping clinicians accurately contour targets and critical organs.</p> <p>MAR offers:</p> <ul style="list-style-type: none"> <li>• Exceptional image quality. MAR is based on the latest in GE Healthcare smart technology, which uses a novel three-step, sinogram-based iterative algorithm.</li> <li>• Streamlined workflow. MAR requires only one scan, making the process of obtaining a corrected image fast and efficient.</li> <li>• Dose conscious. MAR requires only one acquisition.</li> <li>• Patient comfort. The efficient, single-scan process helps to reduce patient time inside the scanner.</li> <li>• Versatility. MAR is designed to enhance clarity across a range of images including scans of hip implants, dental fillings, screws and other metal objects.</li> </ul>
6	1	<p>Q.Prepare option</p> <p>Q.Prepare is a new functionality introduced with Discovery IQ.</p>

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		<p>Critical tool for the operator to perform Quantitative PET imaging, it is designed to facilitate the patient exam preparation.</p> <p>Q.Prepare offers the following functions:</p> <ul style="list-style-type: none"> <li>• Ability to view parameters of prior exams</li> <li>• Compare prior parameters to current exams</li> <li>• Ability to pre-enter study information</li> </ul>
7	1	<p>PET Gating option</p> <p>PET Gating acquisition option for Discovery products. Enables PET respiratory gating scan functionality.</p>
8	1	<p>Q.SUITE OPTION PKG</p> <p>A suite of innovative PET Quantitative tools from GE Healthcare designed to help clinicians generate more consistent PET measurements, and therefore assess treatment response more accurately than ever before.</p> <p>Q.Static: represents a starting point for adding motion correction techniques to your facility and the opportunity to build towards a full 4D phase-matched workflow. Without disrupting your standard static whole-body workflow, we designed Q.Static to automatically isolate data when organs are in a low motion state, thereby correcting for motion across the entire chest or torso. The result is a single image series with reduced blurring from organ motion, and therefore more consistent quantitation compared to a static image.</p> <p>Motion Match - Acquires and views fused gated PET and CT images on the console for: PET and CT respiratory and cardiac capability for motion analysis; PET and CT dynamic imaging for compartmental PET data model analysis and retrospective CT gating; and PET attenuation correction from CT diagnostic data, including dynamic and gated CT techniques for motion management.</p> <p>Q Freeze combines the quantitative benefits of 4D</p>

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		<p>phase-matched PET/CT imaging into a single static image that uses 100% of the counts collected in the acquisition.</p> <p>Combine with Q.AC to create 4D cine data for attenuation correction of PET images at low dose levels.</p> <p>Q.AC - Accurate attenuation correction is required for quantitative PET imaging. But in large anatomy imaging at low doses, the CT beam may not be strong enough to fully penetrate through the patient to the detector, potentially resulting in variations in attenuation measurements. Our next generation Q.AC algorithm is designed to reduce potential variance, helping to ensure that the attenuation coefficients used in image reconstruction are accurate. This may improve consistency even in the most clinically demanding circumstances.</p>
9	1	<p>Q.CORE Power to Q.COREPower+ upgrade for Discovery MI DR</p> <p>Q.COREPower+ is the next generation expandable PET reconstruction technology that makes the latest PET/CT workflows clinically relevant by handling massive PET data sets with ease.</p> <p>While Q.COREPower is the perfect solution for conventional TOF reconstruction, Q.COREPower+ will provide a performance upgrade needed for Q.Clear‡ full convergence iterative reconstruction for advanced acquisition protocol such as cardiac dynamic or respiratory gating.</p> <p>Q.COREPower+ upgrade will allow Discovery MI DR ES user to access</p> <ul style="list-style-type: none"> <li>• MotionMatch‡ 4D PET/CT imaging</li> <li>• Q.Freeze‡ imaging</li> </ul> <p>Pre-requisite: Q.COREPower ‡ option</p>
10	1	<p>COLUMBIA LONG LENGTH CABL</p> <p>COLUMBIA LONG LENGTH CABL</p>
11	1	<p>Medium length Chiller Cooling Hose Line</p> <p>50ft Medium Length Chiller cooling hose line. Recommended length to meet most siting room layouts.</p>

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12	1	<p>PET CARDIAC PACKAGE</p> <p>The PET Cardiac Package allows the user to acquire a cardiac PET exam. This package contains the following items necessary for PET cardiac study:</p> <ul style="list-style-type: none"> <li>- PET Cardiac Gating capability (P5051LH)</li> <li>- Cardiac PET ACQC (P5051LE)</li> <li>- Cardiac VUE (P5051LV)</li> </ul> <p>ECG monitor and AW are not provided with this package.</p> <p>Attenuation Correction Quality Control ensures proper cardiac registration in PET and CT, particularly useful in Cardiac stress rest PET/CT application. Mis-registered PET and CT attenuation correction data due to organ motion may be re-aligned and reconstructed again to try and recover proper PET attenuation correction to help avoid CT AC re-scans.</p>
13	1	<p>2M Scan Range option</p> <p>2 meter scan option</p> <p>The system can perform a full 2 meter acquisition of both CT and PET data, through the use of a cradle extender and specific acquisition protocols.</p>
14	1	<p>Rear Lasers / Gantry Display</p> <p>Rear Gantry Control Panels, Rear Cover Display and Rear Laser Landmark for Discovery MI PET/CT scanner.</p>
15	1	<p>Bar Code Reader -USB</p> <p>USB Bar Code reader for use with ConnectPro (optional) Connect Pro - Offers New Levels of Productivity by Providing a Connection Between the Facilities Hospital (HIS) or Radiology (RIS) Information System. ConnectPro Simplifies and Eliminates Errors in Patient Data Entry.</p>
16	1	<p>PET Adjustable Desk</p> <p>Adjustable Desk for PET/CT console.</p>
17	1	<p>Chair</p>

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18	1	<p>Chair for CT scanner</p> <p>DIACOR RTP Flat Tabletop for CT and PET/CT Systems - RT16, DVCT, Disc 600/690, HD750 and VCT</p> <p>DIACOR RTP Flat Tabletop for CT and PET/CT Systems- RT16, DVCT, Discovery PET/CT 600, 610, 690, 710, HD750, and VCT</p> <p>Diacor Radiation Therapy Planning Overlay For GE Healthcare Global Tables, Model 1700, 2000 and PET/CT</p> <p>The Radiation Therapy Planning Overlay, or "CT Overlay", provides a secure flat surface for CT Simulation applications, consistent with the treatment couch, for accurate and reproducible patient positioning.</p> <p>FEATURES/BENEFITS</p> <ul style="list-style-type: none"> <li>o Carbon fiber construction with foam core provides durable, light-weight device with outstanding imaging properties</li> <li>o Varian Exact Technology and Indexing Immobilization Patient Positioning system along entire length of the overlay</li> <li>o Designed specifically for GE Healthcare's Global Table</li> <li>o Easily locks and unlocks from the CT Table, providing easy transition between therapy and diagnostic procedures</li> </ul> <p>INCLUDED:</p> <ul style="list-style-type: none"> <li>o Carbon Fiber CT Overlay with locking accessories</li> <li>o Two Varian Exact Couch Indexing Bars</li> <li>o One Varian Respiratory Gating Interface Plate and associated mounting hardware</li> </ul> <p>SPECIFICATIONS:</p> <p>Weight: 30 lbs. (13.61 kg) Length: 85.25 in. (217.17 cm) Width: 20.87 in. (53.0 cm) Height: 1.62 in. (4.12 cm)</p>
19	1	<p>PET Annulus Phantom – DQA (Daily Quality Assurance); for Signa PET/MR, Discovery IQ series , Discovery MI, MI-DR</p> <p>PET Annulus Phantom – DQA (Daily Quality Assurance); for Signa PET/MR, Discovery IQ series , Discovery MI, MI-DR</p> <p>The PET Annulus DQA (Daily Qualified Assurance) imaging phantom for the Discovery IQ PET system or SIGNA PET/MR system is a uniform solid suspension of Ge-68 encased and</p>

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		<p>sealed in an annular, black plastic shell.</p> <ul style="list-style-type: none"> <li>• Recommended for accurate calibration of your PET detector and easier quality control</li> <li>• Designed to be held in place during use by standard source holders provided with scanning equipment</li> <li>• No mechanical maintenance is required</li> </ul>
		<p>When a new phantom or pin source is purchased, the e-cat will include a Used Source Return Kit, intended for the immediate return of the depleted source(s) replaced. Note the following condition:</p> <ul style="list-style-type: none"> <li>• Cost to the customer is the return freight</li> <li>• Return kit has an RA# that is good for 6 months, before expiration.</li> <li>• Returns after 6 months subject to additional charges</li> </ul>
20	1	<p>PET/CT VQC Volumetric Quality Control Phantom for Discovery, IQ 3-ring (15 cm), IQ 4-ring (20 cm) , IQ 5-ring (25 cm), Discovery 710, 610, 690, 600, Discovery MI/MI-DR, Optima 560</p> <p>VQC Phantom</p> <p>PET/CT VQC Volumetric Quality Control Phantom for Discovery, IQ 3-ring (15 cm), IQ 4-ring (20 cm) , IQ 5-ring (25 cm), Discovery 710, 610, 690, 600, Discovery MI/MI-DR, Optima 560</p> <p>When a new phantom or pin source is purchased, the e-cat will include a Used Source Return Kit, intended for the immediate return of the depleted source(s) replaced. Note the following condition:</p> <ul style="list-style-type: none"> <li>• Cost to the customer is the return freight</li> <li>• Return kit has an RA# that is good for 6 months, before expiration.</li> <li>• Returns after 6 months subject to additional charges</li> </ul>
21	1	<p>PET Annulus Phantom Shield Container - DQA Safe</p> <p>Wheels feature swivel castors for easy mobility and wheel locks for added stability.</p> <p>Lid features a handle for easier opening.</p> <p>Spring loaded covered hinge assists when lifting the lid.</p> <p>Container latch seals the phantom inside to ensure radiation</p>

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22	1	<p>gaps are eliminated.  Latch includes option to use a padlock to secure the phantom in the container.  Gusset holes allow the facility to secure the shield to the site with a chain or cable.  The container's interior walls feature a soft plastic for easier insertion and removal of the phantom.  Weight - approximately 300 lb / 136 kg.</p> <p>14 KVA 3-Phase Partial UPS for VCT</p> <p>The 14KVA Partial UPS has been specifically designed to coordinate with GE Healthcare CT &amp; PET/CT scanners. In the event of a power outage a partial system UPS provides continuous backup power to the scanner host and control computers, thus assuring no loss of usable scan data.</p> <ul style="list-style-type: none"> <li>o Critical circuits in the gantry and table remain powered which facilitate the safe removal of the patient from the scanner.</li> <li>o If power is restored within the battery hold-up time, the operator can continue scanner operations without the need to reboot the system.</li> <li>o When longer power outages are anticipated, the UPS provides time for the operator to safely remove the patient and complete an orderly shutdown of the system software</li> <li>o Maintains system electronics and allows critical scanner operations to continue for 10 minutes (typical) after loss of power</li> <li>o Protects electronics from under voltage, brownouts, line sags, over voltage and transients</li> </ul> <p>SPECIFICATIONS</p>

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23	1	<ul style="list-style-type: none"> <li>o Dimensions (H x W x D): 49" x 12" x 32"</li> <li>o Weight: 620 lbs.</li> <li>o Output Frequency: 50 or 60 Hz, auto-sensing</li> </ul> <p>NOTE: ITEM IS NON-RETURNABLE AND NON-REFUNDABLE  NOTE: REMOVAL/DISPOSAL OF OLD UPS IS THE CUSTOMER'S RESPONSIBILITY  NOTE: INSTALLATION AND RIGGING IS NOT INCLUDED  NOTE: CONTACT GE SERVICE OR EATON FOR START-UP ASSISTANCE</p> <p>Ivy 7800 Cardiac Monitoring Kit</p> <p>The Model 7800 is Ivy Biomedical's fifth generation of cardiac trigger monitors intended primarily for use on patients in applications requiring precision R-wave synchronization. Incorporating a simple, easy-to-use touchscreen interface, the 7800 displays two simultaneous ECG vectors along with the patient's heart rate. The Trigger ECG vector (top waveform) can be selected from Leads I, II, III, or Auto Lead Select. The Second ECG vector (bottom waveform) can be selected from Leads I, II, III. If required, High and Low heart rate alarm limits can be adjusted to bracket the patient's heart rate so that a violation of these limits produces an audible and visual indication of the alarm.</p> <ul style="list-style-type: none"> <li>o Impedance Measurement: Measures Impedance between the patient's skin and each individual ECG electrode</li> <li>o Automatic operation: After patient cables are connected and the monitor is receiving an ECG signal, the monitor finds the peak of the</li> </ul>

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		<p>R-wave and generates synchronization pulses</p> <ul style="list-style-type: none"> <li>o Bright TFT active matrix 8.4 in. color touch screen LCD with a wide viewing angle and large heart rate characters enhance visibility of patient data</li> <li>o Polarity lock helps reduce the number of false triggers when tall T waves or deep S waves occur</li> <li>o Color trigger mark indicates timing of each trigger pulse with respect to the ECG</li> <li>o System interlock function indicates proper connection with the imaging device</li> <li>o Integrated USB Drive - allows user to store and retrieve ECG events for retrospective analysis</li> <li>o Auto-notch selects the correct ECG notch filter. This reduces interference on the ECG signal</li> </ul> <p>The Kit includes:            Cardiac Trigger Monitor; set of 4 RT lead wires - 30 in, low noise patient cable - lead, Ethernet Internet cables, ECG adult electrode (box of 40), cord-set hospital grade (12ft), NuPrep Gel, USB Memory Stick, Recorder Paper, Roll Stand for 7000 series and IPC cable.</p>
24	1	<p>Onsite CT 4D Training            1.5 Days Oncology Applications Training</p>
25	1	<p>Discovery PET/CT Core Training Package (Experienced GE PET/CT Users)</p> <p>Discovery PET/CT Training Package (Experienced GE PET/CT Users)</p> <p>Training designed for users with experience on GE PET/CT. Training package incorporates a variety of instructional methods for optimal learning and retention from basic to advanced</p>

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26	1	<p>system operation. Offers multiple delivery modes including online, live remote, and onsite training. Package includes up to 14 days onsite, and 16 hours of remote training. Program concludes one year after the initial start date. Instruction is provided from 8 AM to 5 PM, Monday through Friday and includes T&amp;L expenses.</p>
	1	<p>Standard sce pack L3 W</p> <p>GE Healthcare has reclassified its service tools, diagnostics and documentation into various classes (please refer to the Service Licensing Notification statement at the beginning of this Quotation). The Standard License provides access to service tools used to perform basic level service on the Equipment and is included at no charge for the warranty period.</p>
27	1	<p><b>AW VOLUMESHARE 7</b></p> <p>Package of Two (2) AW Hardware Upgrades to VolumeShare 7</p> <p>Two (2) AW Hardware Upgrades to VolumeShare 7 with 32GB of RAM</p> <p>NOTE: The AW Workstation that is to be Upgraded with this purchase becomes the Property of GE Healthcare. Upon Installation of the New AW Workstation, the current AW Unit must be De-Installed and Returned to GE Healthcare.</p> <p>NOTE: A Signed Trade-in Addendum Required Upon Order.</p> <p>AW VolumeShare 7 is a multi-modality image review, comparison and post processing workstation built with simplicity and power at its core. Powerful software is optimized to take advantage of state of the art 64 bit technology and multiple cores to ensure leading edge performance.</p> <p>AW VolumeShare 7 features include:</p> <p>Hardware:</p> <ul style="list-style-type: none"> <li>• HP Z440 Workstation</li> <li>• CPU: 2x Intel Xeon E5-2630 Six Core 2.6 GHz CPUs with 15MB Shared L3 Cache each and 1866 MHz Dual Front Side Bus</li> <li>• RAM: 32GB (8x4GB) DDR3 1866 MHz ECC DIMM (optionally</li> </ul>

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		<p>expandable to 64GB)</p> <ul style="list-style-type: none"> <li>• NVIDIA Quadro NVS 310, 512MB Graphics card</li> <li>• 1x 300GB SAS 10k rpm Hard Disk for OS and Apps</li> <li>• 2x 300GB SAS 10k rpm Hard Disks for Data</li> </ul> <p>Software:</p> <ul style="list-style-type: none"> <li>• GE Healthcare HELiOS 6 operating system</li> <li>• Volume Viewer for advanced post-processing</li> <li>• Demo Exams for training and exploration</li> <li>• Fast access to information you need through optional RIS integration &amp; priors post-fetch</li> <li>• Efficient workflow through dynamic load, end review and Key Image Notes features</li> <li>• Productivity package to pre-process exams and allow up to 8 simultaneous sessions</li> <li>• Applications usage monitor to track and view usage of your system</li> <li>• Smart layouts with Volume Viewer General review protocol that optimizes comparison and single exam layouts</li> <li>• Enhanced multi-modality contouring tool with support for PET SUVs</li> <li>• Support for external DICOM USB media and preference management tool to exchange preferences across users</li> <li>• Support for optional, broad suite of multi-modality advanced applications</li> </ul>
28	2	<p>AW VolumeShare 7 Monitors</p> <p>AW VolumeShare 7 Monitors are two high-quality monitors offering bright and high contrast imagery suited to the display of medical images per the AW VolumeShare Indications for Use. Each provides a 19" 1280x1024 (5:4 aspect ratio) display that complies with international medical and patient safety standards and offers the following specifications:</p> <ul style="list-style-type: none"> <li>• Maximum luminance (panel typical) : 330 nit</li> <li>• DICOM Part 14 calibrated luminance: 215 nit</li> <li>• Contrast ratio (panel typical) : 900:1</li> </ul>

Item No.	Qty	Description
29	1	<ul style="list-style-type: none"> <li>• An ambient light sensor</li> <li>• Brightness non-uniformity (measured as per DIN6868-157) : +/-25%</li> </ul> <p>Upgrade Integration Registration from Previous release</p> <p>Integrated Registration - Full Fusion Package Upgrade from CT/MR/PET Integrated Registration</p> <p>Integrated Registration will be delivered on AW Volume Share 7 or AW Server 3.2</p> <p>Integrated Registration is designed to provide easy comparison of three dimensional (3D) anatomical images from Computed Tomography (CT), MRI (Magnetic Resonance Imaging), PET (Positron Emission Tomography), Single Photon Emission Computed Tomography (SPECT) and X-Ray Angiography (XA)*.</p> <p>It allows registration and fusion between two volumetric acquisitions, which come from either the same or from different acquisition modalities.</p> <p>Integrated Registration is available on xw8400 and higher. Current Fusion xw8400 users can easily upgrade to Integrated Registration through a software upgrade.</p> <p>Major features and enhancements are:</p> <ul style="list-style-type: none"> <li>• Ability to combine any two of the 5 modalities together.</li> <li>• Automatic propagation of registration across series acquired in the same patient exam (i.e. same frame of reference) and to any series from any loaded exam that have been manually grouped together.</li> <li>• Full compatibility of the 3 different registration methods: automatic, manual and landmark that can be combined together to provide an optimal result.</li> <li>• 2D, 3D and hybrid 2D/3D Fusion capabilities.</li> <li>• Access to Volume Viewer** functionalities including MPR, Slab and oblique reformations, triple oblique easy definition, Volume Rendering, 3D display, distance and ROI measurements. (The ROI measurement only work on the rigid registered images, not on the non-rigid registered images), layout management, segmentations, film and</li> </ul>

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Item Qty  
No.

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Description

save.

- Ability to save registered data as new DICOM series or as Registered DICOM object (except from SPECT saving which is currently a limitation).
- Ability to draw and save contours as RTSS DICOM objects.

Summary of operation:

- User loads DICOM 3 CT, MR, PET, SPECT and/or XA data into an Integrated Registration protocol.
- Registration is performed based on reference and moving series selection.
- User reviews the quality of the registration with visualization tools and validates results.
- Optional: user defines and saves the contours of structures of interest.
- Registration results are saved.

\* For XA modality series, Integrated Registration currently supports only the 3D X Ray Angiography (i.e., 3D X-Ray Angiography images stored as CT Image Storage DICOM objects) images acquired with GE Innova equipment and reconstructed with the Innova3DXR application. \* Requires Volume Viewer 7 key.

30 1

Upgrade form previous generation Advantage 4D to Advantage 4D

Advantage 4D upgrade from previous generation of Advantage 4D

Prerequisiste includes already existing Advantage 4D software.

Requires AW VolumeShare5 or higher.

Advantage 4D is a non-invasive software option that can be used to provide and display CT CT images of all phases of a breathing cycle for the evaluation of respiration-induced motion. The software will allow the user to retrospectively define the optimal respiratory phase from an image quality standpoint, and group images by the phase selected.

It performs the following functions:

Item No.	Qty	Description
31	1	<ul style="list-style-type: none"> <li>• Examines the motion profile generated by the vendor devices</li> <li>• Sorts images by the phase of the respiratory cycle. Generates multiple phase series for 2D, 3D and 4D viewing</li> <li>• Automatic (Auto4D mode) or manual processing</li> <li>• Measurement of motion extent</li> </ul> <p>Requires VolumeShare5 or higher.</p> <p>CardIQ Xpress Reveal 2.0 Upgrade from Previous Version</p> <p>CardIQ Xpress 2.0 Reveal Upgrade from previous versions.</p> <p>CardIQ Xpress 2.0 Reveal is an integrated post processing image analysis software for Cardiovascular CT on GE's Advantage Workstation. The optional CardIQ Xpress Reveal software can be used to effectively display, reformat and analyze 2D, 3D, and GSI CT images for qualitative or quantitative assessment of the anatomy of the heart and coronary artery vessels from single or multiple cardiac phase image data sets. When used with CardIQ Function, CardIQ Xpress Reveal can also provide functional assessment including relative perfusion information.</p> <p>CardIQ Xpress Reveal can be launched directly or from within Volume Viewer applications using gated axial, helical or GSI CT images; including images created using the SnapShot Freeze intelligent motion correction option.</p> <p>The software includes a variety of different 2D, 3D or reformatted protocols including: display of the coronary vessel tree, angiographic view, 2D and 3D rendering of single or multiple coronary artery vessels or grafts, automatic</p>

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Item Qty  
No.

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Description

reformation of cross sectional cardiac images into planes along short or long axis of the heart, one-touch cath views for 3D or reformatted images, 3D angiographic view phase registration, color mapped plaque density measurements, IVUS-like views, 3D ejection fraction, 4D aortic and Mitral valve views, relative perfusion, transparency views and beating heart images from single or multiple cardiac phase image data sets. CardIQ Xpress Reveal combines simplified user workflow with SnapShot Freeze intelligent motion correction imaging.

- o Pre-processing the images & models including SnapShot Freeze exams, for faster review
- o Loading images into the auto launch area for real-time review of multiple exams
- o Easy switching from one protocol to the other without exiting the application
- o Single click one-touch cath views
- o Batch movie output within cardiac reformat
- o User defined layouts within vessel analysis for simplified viewing and filming
- o Multi-phase load to single phase review

The CardIQ Xpress reveal option allows the user to:

- o Rendering and display of 2D/3D coronary vascular tree images with automatic vessel tracking & labeling with single click of a protocol. Images can be reviewed in axial, reformat, curved, oblique MPVR, and cross section views

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Item Qty  
No.

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Description

- o Measurements of coronary arteries including stenosis and stenosis length, and density
- o PlaQID to color code non-calcified and calcified plaque with volume measurements.
- o 2D reformat review with predefined views to review all coronary vessels.
- o Color enhanced relative perfusion defect pattern recognition for detection of ischemic heart disease with 4 color patterns
- o Automatically render data for streamlined reading to include: 3D rendered heart, angiographic view, tree VR, and ejection fraction.
- o Reformat standard axial CT images of single or multiple cardiac phases automatically into short, long and two chamber long axis of the heart for easy review
- o Perform functional evaluation of the heart and cine capabilities for multiphase beating heart images with one easy click
- o Extraction of the left ventricle and automated ejection fraction and volume measurements. Note: CardIQ Function Xpress is needed if myocardial wall motion, mass, wall thickness or chamber volumes for the Right Ventricle, Left Atrium, Right Atrium is needed.
- o 4D aortic valve and mitral valve views with one touch
- o Ability to select different protocols without exiting the application
- o Pre-defined VR IVUS-like views for virtually determining plaque compositions

Item No.	Qty	Description
		<ul style="list-style-type: none"> <li>o One touch angiographic view protocol display coronary vessel tree and myocardium with automatic removal of heart chambers for cath comparative view</li> <li>o Heart transparency model allowing for full visualization of coronaries in relations to the heart chambers with the ability to fade out the chambers of the heart</li> <li>o Oblique reformat views in the standard cath angles for easy analysis of the coronary vessels</li> <li>o Load multi-phase images, review the data and decide which phase or phases will be reviewed for further processing by dropping the non-essential phases</li> <li>o Phase registration - ability to register images from different cardiac phases into a unique data set. The data set can then be saved as a 3D object and/or used for further analysis</li> </ul> <p>System requirements:</p> <ul style="list-style-type: none"> <li>o AW VolumeShare 7 or AW Server 3.2</li> <li>o Auto Launch and Preprocessing Option</li> </ul>
32	2	<p>CortexID Suite Upgrade from previous version</p> <p>CortexID Suite Upgrade from CortexID</p> <p>CortexID Suite is an automatic quantitative analysis package for the processing of FDG and beta amyloid PET brain scans. This is an evolution of the original Cortex ID application.</p> <p>Key Features include:</p> <ul style="list-style-type: none"> <li>• Automatic processing of: FDG, (F18) Flutemetamol, (F18) Florbetapir, (F18) Florbetaben, (C11) PIB*</li> <li>• Well proven, robust analysis method of 3D stereotactic</li> </ul>

Item No.	Qty	Description
		<p>surface projection (3D SSP), as well as VOI and voxel based quantitation.</p> <ul style="list-style-type: none"> <li>• Automatic Co-Registration and Fusion with MR and CT</li> <li>• Normal databases for FDG, Flutemetamol and PIB</li> <li>• Longitudinal Comparison providing simultaneous quantitative results of two time points</li> <li>• Ability to load dynamic data</li> <li>• Q.Check to alert you to acquisition parameter changes</li> <li>• Qualitative + Quantitative results in 90 seconds or less on average</li> <li>• Newly designed exam summary to enhance communication back to referring physicians and patients</li> <li>• Flexible, interactive interface for easy customization</li> <li>• Efficient workflow for consistent approach to reads</li> <li>• Interactive, rotating 3D SSP models for review and exporting</li> <li>• Easy export of quantitative results for database tracking</li> </ul> <p>CorexID Suite Requirement: AW 4.6 or later or AW Server 3.1 or later.</p> <p>*To Include PiB norman database include either:  P50801CR - CortexID Suite PIB P50851CR - Cortex Suite PIB Single Floating License These are no charge license's but are needed to be able to have Z-score information for C11 PIB scans.</p>
33	2	<p>PET VCAR 1 or 2 Upgrade to PET VCAR 3</p> <p>PET VCAR 1 or 2 Upgrade to PET VCAR 3</p>
	<b>1</b>	<b>Technical Service Training</b>
34	1	<p>PET Discovery MI Advanced Service Training</p> <p>PET Discovery MI Advanced Service Training</p> <p>This course provides the knowledge and skills necessary to perform service tasks on the GE PET/CT Discovery MI system. Knowledge and service skills are practiced and applied during the lab activities and classroom interactions. Student will have completed PET Discovery 600 Series course or PET Proficient</p>

Item No.	Qty	Description
35	1	<p>Service Training course prior to attending this course. Please visit our webpage to register:  <a href="http://www3.gehealthcare.com/en/education/product_education_-_te">http://www3.gehealthcare.com/en/education/product_education_-_te</a>  or contact us at: <a href="mailto:edservices@ge.com">edservices@ge.com</a></p> <p>PET Proficient Service Training</p> <p>PET Proficient Service Training  This course provides the knowledge and skills necessary to perform service tasks on GE PET systems. It is an integrated training program that includes instructor-led training session(s) including hands-on, and Lab activities. Knowledge and service skills are practiced and applied during lab activities. The PET Proficient course will cover the PET/CT 6xx series, PET/CT 710, PET/CT IQ, DST, and DSTE systems. The Proficient class will fully cover the first call service needs. A knowledge-based exam is included in this course. Please visit our webpage to register:  <a href="http://www3.gehealthcare.com/en/education/product_education_-_te">http://www3.gehealthcare.com/en/education/product_education_-_te</a>  or contact us at: <a href="mailto:edservices@ge.com">edservices@ge.com</a></p>

**716834DVCT Trade In**

# Options

Item No.	Qty	Description
36	1	<p data-bbox="495 533 1081 632">MEDRAD Stellant D DualFlow ISI-ready on ceiling mount (85cm post length) with Certegra Workstation and ISI900G CT communication kit</p> <p data-bbox="495 659 1081 936">GE Healthcare now offers the Medrad Stellant D injector with Certegra workstation. The dual syringe CT injection system is reliable and easy to use. It features saline flush and DualFlow capabilities allowing users to test vein accesses with saline, and prime patient tubing with saline to save contrast. Medrad Stellant D CT Injection System users are armed with:</p> <ul data-bbox="495 957 1081 1514" style="list-style-type: none"><li>• Automation features to help maximize throughput: integrated auto load, auto retract, auto prime and auto syringe sensing</li><li>• Save up to 250 protocols</li><li>• Quick, easy install and detachment</li><li>• Check for air confirmation button and arming on the injector head</li><li>• Pressure monitor graph and flow profile preview</li><li>• Up to 6 phases including pause and hold capabilities</li><li>• Programmable pressure limit</li><li>• Colour touch screen</li><li>• Either ceiling counterpoise or pedestal-mount configurations</li></ul> <p data-bbox="495 1524 737 1549">Certegra Workstation</p> <p data-bbox="495 1570 1062 1812">From study set-up and preparation to study administration and results management, the Certegra Workstation serves as a workflow-centralized technologist interface to help users enhance efficiencies and patient care, enabling options such as P3T 2.0 (Personalized Patient Protocol) software environment.</p>

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Item Qty  
No.

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Description

The benefits of DualFlow (simultaneous injection of contrast and saline)

- Provide more uniform attenuation of the right and left ventricles
- Minimize artefacts by achieving proper attenuation levels
- Visualize the right coronary arteries and right ventricles in a single study by achieving more uniform attenuation

MEDRAD Stellant D Certegra injector with Integrated CT Communication

Designed to save time and increase CT scan throughput, the MEDRAD Stellant D with Certegra Workstation is validated for use with GE's Enhanced Xstream Injector option on selected scanners - enabling CAN Class 4 functionality for seamless communication. The resulting injector and CT scanner integration benefits include:

- Reduced overall programming time
- Improved scanner and injector protocol matching through programming of the injector from the scanner console
- Better control over contrast injection procedure with a synchronized CT scan start time. A single button-press on the scanner starts both the injector and scanner
- Preview injection parameters before beginning the scan
- Complete post-study reviews of injection results at the scanner console
- Automatic documentation of the injection results in PACS System

Ceiling-mount configuration includes:

- Dual injector head on Overhead Ceiling Counterpoise
- Syringe heat maintainer

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Item Qty  
No.

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Description

- Certegra Workstation with USB drive
  - DualFlow software
  - ISI-ready software
  - ISI900G CT communication kit
  - Base control unit
  - 22.8 m (75 ft) head extension cable
  - 7.6m (25 ft) base to display cable
  - Power cord, North America
  - Power cord, international
  - Product information package
  - Operations manual
  - Installation, customer's operational training at time of installation, and one year full on-site warranty in Bayer service countries
- System Specifications
- Flow Rate (range & increments): 0.1 to 10 ml/sec in 0.1 ml increments
  - Volume (range & increments): 1 ml to syringe capacity in 1 ml increments
  - Programmable Pressure Limit 200 ml syringe: 325 psi, 2241 kPa
  - Scan delay: 0-300 seconds (5 minutes) in 1 second increments
  - Pause: 1-900 seconds (15 minutes) in 1 second increments
  - Hold: maximum HOLD time is 20 minutes
  - Syringes (volume capacity): 200 ml sterile disposable syringe
  - Number of phases: 6
  - Number of protocols: 250
  - Electrical Requirements (VAC/Hz): 100-240 VAC, 50/60 Hz
  - Syringe Heat Maintainer Range: 35 °C +/-5, 95 °F +/-9

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Item Qty No.	Description
	<ul style="list-style-type: none"><li>• Dual Injector Head: 15.5 cm (6.1") H x 30.7 cm (12.1") W x 36.8 cm (14.5") D, 8.1 kg (17.0 lb) without syringe</li><li>• Certegra Workstation (CWS): 34.2 cm (13.5") H x 40.0 cm (15.8") W x 30.0 cm (10.2") D, 8.0 kg (17.6 lb)</li><li>• Base Unit: 29.2 cm (11.5") H x 27.9 cm (11.0") W x 22.2 cm (8.8") D</li></ul>

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