

**A&MM SERVICE
VA MEDICAL CENTER
115 S 84TH ST STE 101
MILWAUKEE, WI 53214**

PO# 695-B28023

THIS REQUEST HAS BEEN DIVERTED TO HINES ,IL
DELIVERY AND INSTALLATION WILL BE AT HINES, IL

THE STATION REQUIRES THIS SYSTEM TO BE IN A TRAILER

Line #	Description	Qty
--------	-------------	-----

1	NM ISP V5 - DX Special	1
---	-------------------------------	---

To create the kind of smart clinical integration that often leads to enhanced patient outcomes, Philips has introduced the IntelliSpace Portal, a multimodality workspace that facilitates a higher level of collaboration among radiologists and referring physicians while streamlining imaging workflow. The IntelliSpace Portal uses advanced networking capabilities to facilitate collaboration among clinicians that may ultimately lead to faster, more accurate and informed patient care.

The IntelliSpace Portal is a multimodality thin-client applications server that turns virtually any PC that meets the minimal requirements into an advanced multimodality imaging system workspace that can support radiology, cardiology, oncology and other specialties' imaging needs. This allows radiologists and referring physicians - who are often burdened with scheduling conflicts - to review the results of multiple imaging modalities at their convenience in their preferred location . Until now, the most powerful visualization workstations were housed in the radiology department requiring a referring physician to make a special trip to radiology in order to view the advanced images so crucial to accurate patient diagnoses. With Intellispace Portal's advanced networking and thin-client technologies the access to powerful visualization and image processing is significantly enhanced

The IntelliSpace Portal v5 offers several exciting new features, including:

Access to optional new Nuclear Medicine applications:

- Integrated review application for all NM data i.e. planar, SPECT, SPECT/CT, PET/CT, PET/MR
- Advanced fusion and auto-registration support

Optional NM Planar & SPECT Processing

- Planar Gated, Whole Body, Pulmonary, Renal, Endocrine, Hepatobiliary, Gastric, Esophageal, Salivary
- JetPack App Suite
- AutoSPECT
- Daily QC and NEMA Suite

Optional NM Astonish Reconstruction (for Philips system) Access to optional Complete NM Cardiac Quantification Portfolio

- AutoQuant
- Invia Corridor4DM
- Emory Cardiac ToolBox

Scores of exciting additional clinical features and workflow enhancements throughout the CT, NM and MR applications originally introduced on IntelliSpace Portal v4.0

These also include access to optional new CT and MR applications such as:

- CT Liver Analysis
- CT EP planning
- CT Dental planning
- MR Permeability* (not for sale in the US)

IntelliSpace Portal delivers enterprise-wide multimodality display of CT, MR and Nuclear Medicine datasets. Proprietary technology streams display to the client over a LAN, WAN or any broadband internet connection through the hospital's VPN (virtual private network) without the need to necessarily download CT/MR or NM data to the client PC as 'heavy lifting' and complex processing of the data is done on the server.

Client Specifications:

Memory (RAM): 2GB available RAM. Recommended: 4 GB or above.

Memory (RAM) for NM 3rd party Apps: 4 GB RAM or above

Processor (CPU): Intel Core 2 Duo 1.8 GHz / AMD Athlon 64 1.8 GHz; (Recommended: Intel Core 2 Quad 2.4 GHz / AMD Phenom II X3 Triple core 2.8 GHz – or equivalents/higher)

Free Disk Space*: 3 GB or above (on Drive C)

* Additional 5 GB of free disk space are required to burn DVD.

Monitor:

- Minimal screen resolution: 1024x768. Recommended: 1280x1024 (or above)
- Screen Resolution for NM Apps: 1280x1024 (or above)

- Up to 3 MegaPixel monitors are supported
- 96 DPI
- 24bpp (or higher) color depth monitors (no monochrome monitors)

Multi monitor: Require adequate support of client display card and driver

Minimum Network adapter speed: 100 Mbit/s or above

LAN Network

Network bandwidth/latency (LAN): 100 Mbit/s or above, with latency <10ms

Home connection

- Network bandwidth/latency (for home connection): 5 Mbit/s or above, with latency <20ms
- Network bandwidth/latency for NM Apps (for home connection): 10 Mbit/s or above, with latency <20ms
- Network bandwidth/latency for NM 3rd Party Apps (for home connection) : 100MB/s with <10ms latency

Software Pre-Requisites:

- Supported OS:
- Windows XP SP2 (32 & 64 bit)
- Windows Vista (32 & 64 bit)
- Windows 7 (32 & 64 bit)
- Net Framework 3.5 SP1 and/or above

Additional Software Recommended (for optional features):

Adobe Acrobat Reader [for Report & Help]

Adobe Flash Player [for On-line Web Trainings]

Windows Media Player 9.0 or above [for saving Movies]

IMAPIv2 [for Burning CD/DVD]

This GEMINI PET/CT system includes the accessories, structural hardening, and modifications to support operation in a mobile trailer. The trailer is purchased separately. The mobile ready configuration also includes the shipping and extra qualification of the system in the trailer. Note that the following limitations exist for the mobile configuration:

- The fully open gantry position is not available for clinical use (available for Service use only)
- External laser positioning options are not available
- Ceiling mounted injector options are not available

The GEMINI TF PET/CT system provides revolutionary TruFlight PET and Brilliance CT technologies combined with advances in how people can interact with the systems. Both technology and workflow are critical in handling the large amounts of data provided by multi-modality imaging -- and in helping achieve a sustainable competitive advantage.

The GEMINI TF, 16-slice configuration system puts you ahead of the applications curve. In addition to providing additional confidence during routine oncology FDG studies, the acquisition speed of PET and CT enables you to perform advanced applications such as pulmonary gating, cardiac studies and molecular imaging.

Highlights

- Time-of-Flight Performance Package:
 - Time-of-flight PET imaging precisely localizes each PET annihilation event to dramatically improve image quality, especially for large patients
 - Full TruFlight PET architecture: optimized for time-of-flight imaging and provides increased conventional PET performance
 - Exceptional sensitivity for fast scans, low dose imaging, and advanced applications
 - High resolution for lesion detectability and exceptional anatomic detail
- Brilliance CT system with 16-slices per revolution for large volumes and thin slices
- Advanced reconstruction architecture for high quality, time-of-flight fully 3D PET and cone beam CT reconstruction
- Brilliance Workspace user environment improves PET/CT productivity by working the way the user does
- Exclusive OpenView gantry design is designed to reduce patient claustrophobia and facilitate clinical access

The flexibility of this ultra high performance scanner includes features designed to automate clinical exams, ease through reconstruction and post-processing, and aid in accuracy of diagnoses. Above all, the speed and usability of the GEMINI TF, 16-slice configuration positively impacts everyday workflow and increases patient throughput throughout the entire workflow process:

Patient handling and set up

- Scan and image acquisition
- Dose Management
- Reconstruction and display
- Post-processing and communication

Philips has created a comprehensive package of tools containing advanced components and productivity features that make workflow smooth and easy.

PET/CT User Environment

The user environment is flexible and available wherever it is needed. It is a powerful set of PET/CT and diagnostic CT applications that improves productivity by working the way the user does. Users can do all of their planning, scanning, visualization and archiving in a simple, easy-to-use graphical user interface (GUI) harmonized across Philips Healthcare.

Logical Guided Flow graphical user interface increases productivity through ease-of-use features:

- Features and functions are visible, not hidden
- Most common operations are shown most prominently

A top level workflow bar directs the user along important tasks. This provides the user with maximum flexibility for viewing, performing applications, filming or reporting.

Patient handling

Philips helps improve productivity during patient handling and setup through a variety of features, making patients more comfortable and making technologists' jobs easier. OpenView gantry design features a separation between PET and CT gantries that is designed to reduce patient rejection rates due to claustrophobia.

Gantry Features

- Scan Control Panel: controls and displays for patient couch elevation and stroke are located on both sides of the PET and CT gantries.
- Scan Control Box: gantry and patient couch controls and displays are located conveniently at the operator's console. Additional functions include emergency stop, intercom, and scan enable/pause buttons.
- Gantry Aperture: 700 mm diameter for PET and CT
- Gantry Separation: 300 mm OpenView gantry with additional 580 mm separation for interventional access
- AutoVoice: a standard set of commands for patient communication: before, during and after scanning in multiple languages. Also provides the ability to record customized messages.

Patient Table

- Stroke: 1900mm
- Scan range (PET & CT): 1900 mm
- Table load capacity: 195 kg (430 lbs)

Table Accessories

From extra padding to optimal support, these table accessories prevent fatigue and discomfort and give both patients and technologists a sense of security: patient restraint kit, foam head holder, table pad, foam arm rest, arm boards and a knee pad.

Scan Planning

The Brilliance Workspace provides intuitive registration and easy entry of patient information and clinical procedure selection, using anatomic graphical display and sample images.

Expert Protocol Planning

Tailor protocols to meet specific needs via a selection of parameters optimized for certain studies.

Preset Post-processing

User-defined presets improve workflow, by automatically opening the relevant post-processing applications for a specific type of exam. For example, PET reconstruction can be set up to run

concurrently with data acquisition resulting in shorter reconstruction time.

Survival Plan

Planning via interactive mouse control of multiple, independent acquisition series of any type on Survival image

Automatic Scan

Enables automatic execution of pre-planned studies, with concurrent, on-line or off-line reconstruction, background image archiving to local or remote storage devices, without operator intervention.

PET sub-system

The revolutionary TruFlight time-of-flight PET technology provides the following key clinical benefits:

- Improved PET image quality / greater patient throughput
- Consistent PET image quality for all sizes of patients
- Enabling of molecular imaging applications characterized by low count rates

Improved image quality/greater patient throughput

PET/CT patient throughput of up to 24 patients in a single 8 hour day is feasible by shortening the acquisition time to less than 10 minutes per whole body FDG scan. Faster acquisition speed would also enable routine total body scanning (head to toe). For improved image quality beyond today's standards. PET users could choose to scan longer. Lower doses of FDG could also be used for studies where patient exposure is critical (pediatric imaging, screening tests).

Consistent image quality for all patients

In addition to overall performance improvements, the advantages for larger patients are even more significant. This new GEMINI TF PET/CT system utilizes time-of-flight technology to close the gap in system performance for patients of different sizes. The reading physicians are presented with consistent image quality for all patients, improving ease of interpretation and diagnostic confidence.

Enabling of molecular imaging applications

This new technology also enables researchers to image dynamic processes that require fast sampling by delivering longer useful imaging time (dynamic range) for short-lived isotopes, and enabling the use of very low doses for tracers whose synthesis suffers from low efficiency (F-choline, thymidine, etc.) By enabling imaging characterized by low count rates this technology is opening the pathway to new molecular imaging applications.

PET Detector System

- Crystal Material: LYSO
- Crystal Size: 4x4x22mm
- Detector Architecture: PIXELAR continuous light guide
- Electronics sampling: 25 psec

CT Generator

The Brilliance generator uses low-voltage slip ring technology to provide a constant high voltage to the CT x-ray tube assembly.

- Output capacity: 60 kW
- kV selections: 90, 120, 140 kVp
- mA selections: 20 to 500 mA (at 120 kV)

MRC X-ray tube

With its patented spiral groove bearing design, Philips' MRC tube dissipates heat as rapidly as it is collected, with an effective heat storage capacity far superior to a conventional ball bearing design.

- Motion-free focal spot guarantees optimized image quality
- Noiseless design for patient comfort
- Effective Heat Storage Capacity: 26 MHU
- Anode storage capacity: 8.0 MHU
- Maximum cooling rate: 1608 KHU/min
- Focal Spot (IEC): 0.5mm x 1.0mm (small), 1.0mm x 1.0mm (large)

CT Dynamic Focal Spot

Dynamic Focal Spot (DFS) doubles the data sampling density from the detectors effectively doubling the number of detectors and providing ultra-high spatial resolution in axial and spiral scanning.

CT Detector

Philips designs configuration-specific detectors that minimize the separation between elements to always provide the highest geometric detector efficiency. Direct-to-digital signal conversion with TACH technology reduces dose and improves image quality.

- Material: Solid State - High Performance Multislice Ceramic
- Slip Ring: Optical – 1.1 Gbps transfer rate
- Slice Collimation: 16 x 0.75mm, 16 x 1.5mm, 8 x 3.0mm, 4 x 4.5mm, 2 x 0.6mm

CT Spiral Scanning

- Multiple contiguous slices acquired simultaneously with continuous table movement during scans.
- Multiple, bi-directional acquisition
- Spiral exposure: Up to 100 sec of uninterrupted spiral scanning
- Spiral pitch: 0.13 to 1.5 (user selectable)

CT Axial Scanning

- Multiple-slice scan with up to 16 contiguous slices acquired simultaneously with incremental table movement between scans
- Fused modes for reconstructing partial volume artifacts free thick slices from thin slice acquisition

Test Injection Bolus Timing

This feature establishes the optimum delay time for contrast injection. By using a test injection, a real-time graph of the enhancement in the selected region of interest is displayed.

CT Scan Tools and Scan Tools Pro imaging/ workflow packages for CT

Dose Management

- Philips' DoseWise philosophy is a set of principles and practices that ensures the best possible outcomes with minimal risk to patients and staff. GEMINI TF PET/CT systems employ a number of features that help provide extremely high dose efficiency.
- TruFlight PET technology--minimizes the PET radiation dose by utilizing high stopping power crystal material (LYSO) and 3D acquisition with full axial acceptance angle.
- DoseRight ACS (Automatic Current Selection) - Optimizes the dose for each patient based on the planned scan by suggesting the lowest possible mAs settings to maintain constant image quality at low dose throughout the exam.
- DoseRight DOM (Dynamic Dose Modulation) - Automatically distributes or controls the tube current, increasing the signal over larger areas of attenuation (shoulders, hips, etc.) and decreasing signal over small areas of attenuation.
- Dedicated Pediatric Protocols - Developed in collaboration with top children's hospitals, age and weight-based infant and pediatric protocols ensure the best clinical results with minimal dose.

Reconstruction and Display

PET and CT Data reconstruction is designed to provide the best possible image quality. The GEMINI TF reconstruction system employs list mode, time-of-flight PET reconstruction and true cone beam CT reconstruction algorithms utilizing Philips patented back projection hardware.

Time-of-flight PET reconstruction

The state of the art time-of-flight reconstruction algorithm is a fully 3D iterative technique that utilizes list mode data to reconstruct event-by-event. Reconstruction geometry is defined using the line of response (LOR) approach.

CT Cone Beam Reconstruction Algorithm (COBRA)

Philips' multi-patented ConeBeam Reconstruction Algorithm (COBRA) enables true three-dimensional data acquisition and reconstruction in both axial and spiral scanning. This avoids and /or corrects artifacts present in reconstruction by reducing pixel to noise ratio, resulting in superior multislice image quality.

Reconstruction parameters

Any study can be set up to automatically reconstruct using various reconstruction parameters. Exams can be tailored online while planning the scan, or during off-line reconstruction.

Post-processing and communication

Image Processing and Display

PET/CT Viewer The interactive PET/CT image viewer is designed for fast, efficient and personalized image review and filming purposes.

- Unparalleled flexibility in customization: all images are resizable based on user needs
- Dynamic adjustment of modality, view, orientation and size

- Fast sequential access to patient studies for superior workflow
- Intuitive toolbar controls for image review
- "Auto-Hide" of controls for screen maximization
- One click access to routine functionality (triangulation, SUVs)
- Comprehensive region of interest contouring tools with DICOM RT Structure Set export
- Easy saving of key images (DICOM, JPEG, AVIs) for distribution
- One click addition of key images for reports

Acquisition Computer (PET, Diagnostic CT, & PET/CT data acquisition)

- Computer Architecture: Windows XP Dell Precision host computer with Xeon processor
- Main Memory: 2.0 GB RAM
- Hard Drive: 146 GB
- Display: Dual 19" flat panel color monitors
- Peripherals: 9.1 GB Optical erasable drive, CD Writer

PET/CT Host Processing Computer (PET/CT data processing & viewing)

- Computer Architecture: Windows XP Dell Precision host computer with Xeon processor
- Main Memory: 4.0 GB RAM
- Hard Drive: 438 GB
- Display: 19" flat panel color monitor
- Peripherals: 9.1 GB Optical erasable drive, CD Writer

Image Management and Archiving

Image archiving is organized according to the DICOM 3.0 hierarchical model, in a DICOM 3.0 compliant image format. Lossless image compression/decompression algorithm is used during image storage/retrieval to/from all local archives. Images can be auto-archived to selected archive media.

Filming

The filming function allows the user to set up and store desired filming parameters

Network Requirements

Network connections should be located within 10 feet of the console. The GEMINI TF PET/CT supports 10/100/1000Mbps (10/100/1000BaseT) network speeds. For optimal performance, Philips recommends a minimum of 100Mbps network speed (1Gbps preferred) and for the PET/CT network to be segmented from the rest of the hospital network.

DICOM Connectivity

Brilliance Workspace's full implementation of the DICOM 3.0 communications protocol allows connectivity to DICOM 3.0 compliant scanners, workstations, and printers. Supported service classes include: Verify, Print (greyscale & color), Storage (greyscale, color & multiframe), Secondary Capture (greyscale, color & multiframe), Query/Retrieve, Storage Commitment, Modality Worklist, Modality Performed Procedure Step, RT Structure SetStorage

Other Included Items

- Computer cabinets
- UPS for control room computers

- Sources (shipped separately), phantoms, and fixtures for daily & monthly QC (PET& CT)
- User documentation

Other Optional Items

- Control room table and chair

Clinical Education Program for PET Systems

Pre-Handover OnSite Education: Philips Education Specialists will provide twenty-eight (28) hours of PET/CT GEMINI OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. All training must be delivered within the same visit. Course content is intended to provide an introduction to the hardware and software.. Students should attend all three onsite training sessions. CEUs are not available in all cases. Please read Guidelines for more information, which will be provided to you during the scheduling process. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. Completion of (2) CT modules and (2) PET Modules will be required prior to attending onsite essentials education. Students access didactic courses through the Philips On-Line Learning Center. CT modules consist of an overview of physics, scanner generations, a review of hardware and software components, data acquisition, and image reconstruction. PET modules include an overview of physics, instrumentation, radiopharmaceuticals, patient preparation, and radiation safety.

Handover OnSite Education: Philips Education Specialists will provide twenty-four (24) hours of PET/CT GEMINI OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. All training must be delivered within the same visit. Course content is intended to provide the framework for operational workflow and clinical applications as they pertain to Gemini specifically. Students should attend all 24 hours, and must include at least two of the OnSite Pre-Handover Education attendees. CEUs are not available in all cases. Please read Guidelines for more information, which will be provided to you during the scheduling process. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

FollowUp OnSite Education: Philips Education Specialists will provide twenty-four (24) hours of PET/CT GEMINI Follow-Up Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. All training must be delivered within the same visit. Customer must have used the system for at least 30 days. CEUs are not available in all cases. Please read Guidelines for more information, which will be provided to you during the scheduling process. Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Recommendations: If CT Cardiac option is purchased, it is recommended that 98981292425 (CT Cardiac OffSite Educ 28h) is purchased as well as 989801292078 CT Full Travel Pkg, 989801292238 (CT Cardiac OnSite Educ 16h) or 989801292450 (CT Cardiac OnSite Educ 24h). If PET Cardiac is purchased, it is recommended that 989801292275 (PET Cardiac OnSite Educ 8h) or 989801292276 (PET Cardiac OnSite Educ 16h) also be purchased. If system will be used for Diagnostic CT, for an experienced CT Technologist it is recommended that 989801292424 CT

Brilliance Essentials Offsite 28h as well as 989801292078 CT Full Travel Pkg also be purchased. If Pulmonary Tool kit is purchased, part # 989801292188 (PET CT Apps OnSite Clin Ed 16h) should be purchased.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). **Ref # 507140139-100914**

3 TF Mobile Kit - MC 1

4 GTF 3.5 Local Kit - English 1

Includes English language User Interface, Keyboard and user documentation (paper and electronic)

5 Mobile Operation Docs - ENG 1

Includes English language mobile operation user documentation (paper)

6 PET/CT ECG 1

ECG Gating system for PET and CT cardiac imaging. The system provides a color display with touch screen operations for easy information input and intuitive onscreen navigation with one-touch commands. Includes cart for easy movement and storage.

NOTE: This item is only supported with version 3.5 or higher. If selected it will only be deliverable upon the release/installation of version 3.5 software release. Selection of the ECG Gating system allows for PET cardiac gating. For CT cardiac gating you must select either Rate Responsive CV Toolkit (NCTB870) or Heartbeat CS Pro Package (NCTA045) along with the PET/CT ECG Gating system (NPTB595).

7 ECG Monitor - English 1

8 53cm Flat Pallet 1

The 53cm RTP flat -panel table insert securely locks into the PET/CT cradle providing a surface consistent with your treatment couch for accurate and reproducible patient positioning. Made of carbon fiber with a foam core, this 53cm wide insert features Indexed Patient Positioning. Each longitudinal edge of the insert has a series of indents/notches that receive the indexing bar, (Lok Bar included) which accommodates standard patient fixation accessories. The notch locations have the same spacing and nomenclature as the Varian Exact system and are consistent with the CIVCO/MED-TEC Indexed Patient Positioning Systems (IPPS) products.

The insert is very lightweight, yet very durable in its construction. It can easily be removed and re-inserted for diagnostic studies. The attachment mechanics ensure that, once the top is re-inserted on the cradle, it will be stable throughout the imaging process. Integral aluminum wire fiducials provide a non-symmetric artifact-free reference to determine data orientation in the treatment planning system. The fiducial are divergent as well, to determine slice position/sequence within the data set.

NOTE: This item is only supported on systems running GEMINI 3.5 version or higher. If selected, it will only be deliverable upon the release/installation of GEMINI 3.5 software release.

9 Kit, Label English RTP 1

English language labels for RTP flat pallet option

NOTES:

1. One label kit must be chosen when purchasing the RTP flat pallet option.
2. English is the default kit if no other is chosen.

10 Teal 100kVA Isotran Plus 1

Teal 100 kVA isolation voltage adapting transformer:

Input voltage: 200/208/240/380/400/416/480/500, 3-phase, delta plus protective earth. 50/60 Hz

Output voltage: 480 VAC (277 VAC wye).

Includes: Programmable input circuit breaker.

Includes: TVSS (Transient Voltage Surge Suppression), load side filtration for noise attenuation and remote control contactor.

Weight: 598 lbs. (271 kg)

Dimensions: 27.8" (70.7 cm) wide, 20.5" (52.1 cm) deep, 44.0" (111.8 cm) high.

11 TF Install Pre-Wiring Kit 1

12 GEMINI TF 100 uCi Solid Source 1

Quantity of one (1), Na-22 radioactive source at 100 uCi, for quality control purposes.

13 Point Source Disk, 10UCI, NA-22 6

14 IntelliSpace Portal DX 1

IntelliSpace Portal DX, ideal for department-sized performance of approximately 2-5 concurrent users, is designed to create smart clinical integration that often leads to enhanced patient outcomes. It is a thin-client applications server that turns virtually any PC that meets the minimal requirements into an advanced multimodality imaging system workspace that can support radiology, cardiology, oncology, neurology, orthopedics, and other specialties' imaging needs, thereby streamlining imaging workflow. IntelliSpace Portal uses advanced networking capabilities to enable collaboration among clinicians that may ultimately lead to faster, more accurate and informed patient care. Clinicians can review the results of multiple imaging modalities - including studies acquired from multiple vendors' imaging equipment -- at their convenience in their preferred location. Until now, the most powerful visualization workstations were housed only in the radiology department, requiring a referring physician to make a special trip to view advanced images so crucial to accurate patient diagnoses. With Intellispace Portal's advanced networking and thin-client technologies the access to powerful visualization and image processing is significantly enhanced.

The IntelliSpace Portal offers powerful capabilities, both standard and optional. Standard capabilities include:

- Thin-client architecture and multivendor compatibility that makes image data and applications available anywhere for all CT, MR, Nuclear Medicine images
- IntelliSpace Portal is based on the Extended Brilliance Workspace, which has been ranked at or near the top in the "Best in KLAS" awards in Ease-of-Use for four consecutive years; and was also the 2008 and 2010 "Best in KLAS" designee for Software & Professional Services for Advanced Visualization

- Guided Task workflow walks users through each processing stage from start to finish
- Use of bookmarks, interactive snapshots and other convenient tools to increase efficiencies and minimize training needs
- Unlimited number of client installs: number of concurrent users only subject to available server resources
- Performance-based licensing eliminates the need for purchasing a fixed set of licenses: DX configuration is modeled for a thin-client solution throughout a department, maintaining optimal performance even when as many as 5 users are concurrently using IntelliSpace Portal's processing, viewing and advanced clinical applications tools
- Multimodality Viewer for display of CT, MR and Nuclear Medicine datasets - standard
- Smart MR Viewing, smart linking, cine movie loop for MR datasets
- Multimodality Fusion: PET-CT, SPECT-CT, NM-CT, CT-CT, MR-MR and CT-MR
- Automatic Registration: PET-CT, SPECT-CT, CT-CT and MR-MR
- PET/CT Alpha blending and 2D/3D SUV calculations
- Display of multi-frame secondary captures
- 3D Volume rendering, MIP, VIP, minIP, SurfaceMIP
- Slab Review capabilities including regional investigation and curved MPR
- Volume Explorer: for instant and interactive seed-growing 3D segmentation
- "Glass View" to display bony structures in relation to 3D volumes
- Comprehensive DICOM Printing ("Filming")
- Dual monitor support -- for color monitors.
- DICOM & IHE compliance
- Supports PACS integration

IntelliSpace Portal proprietary technology streams display to the client over a LAN, WAN or any broadband Internet connection through the hospital's VPN (virtual private network) without the need to download the CT, MR or Nuclear Medicine data to the client PC. The 'heavy lifting' and complex processing of the data is done on the server.

Key specifications and requirements:

Server hardware specifications for Tower configuration*:

- Dell PowerEdge T610 Tower Chassis
- 2x Intel Xeon X5560 Processor 2.8 GHz, 4 Cores
- 24 GB memory
- 3x 300GB SAS 15k 3.5" HD (RAID 5 configuration)
- Form Factor: 5U
- Tower dimensions : 18.85" (47.89cm) H w/feet x 8.92" (22.66cm) W x 26.55" (67.43cm) D ;
- Power Supply: 110-240 Volts - redundant hot-plugs
- 0.5TB storage

*For Rack mounted configuration DELL PowerEdge R620 server will be provided

Server software specifications

- Windows 2008 R-2 Server 64-bit edition.
- Philips IntelliSpace Portal server software, including: Proprietary Portal server application

- User management application for managing user database
- McAfee antivirus software provided by Philips

Networking:

- TCP/IP protocol only Static IP address Security:
- HIPAA compliance
- DIACAP compliance
- Portal Server access for authorized user only
- Access to the computer itself either using its console or by remote desktop
- Encrypted users/groups database file
- User management application available only to defined Portal administrators
- Encrypted transfer over the network of user name and password information
- Audit trail
- Windows Firewall
- Network requirements:
- Gigabit connections recommended
- Domain based network environment recommended

Client Hardware requirements

- Screen resolution: 1280 x 1024 (recommended) or 1024 x 768
- Minimum processor speed: Intel Core 2 2.0 GHz equivalent (recommended)
- Minimum memory: 2 GB (recommended) or 1 GB (minimum)
- Gigabyte-speed network adapter
- 500 MB free disk space on C: drive (1024 MB Recommended)
- 3-button mouse

Client Software requirements

- Windows XP with SP2 or above
- Windows Vista, Windows 7 account administrative access for initial installation
- Ability to add the IntelliSpace Portal to the firewall exception list
- .NET framework 3.5 or higher

15

NM AutoQuant: 1 User

3

Includes SPECT AutoQuant and QPET.

SPECT AutoQUANT is an automated approach to the analysis, quantification and review of perfusion and function from myocardial perfusion SPECT and Gated SPECT images. It includes:

- QPS: Quantitative Perfusion SPECT
- QGS: Quantitative Gated SPECT
- QBS: Quantitative Gated Blood Pool SPECT
- Normals Databases (TI-TI, Dual Isotope, MIBI-MIBI, VantagePro, Astonish, User- Definable)

PET Review (QPET) - allows user to compare perfusion and viability data for a quantitative assessment of hibernating myocardium.

The feature provides one floating license, allowing one concurrent user to access to this feature on any IntelliSpace portal client.

Note: This option is available only on IntelliSpace Portal DX, HX, and EX. Maximum of 5 floating licenses can be ordered on DX and maximum of 10 floating licenses can be ordered on HX and EX

Prerequisites: IntelliSpace Portal v5.0

Note: The user interface and instructions for use with this option are available in the following languages only: English, French, Italian, German, Spanish, Japanese and simplified Chinese. Please consult your regulatory or marketing contact if this option can be sold in your market

16

NM Review

1

NM Review application that provides a comprehensive review and analysis environment for Planar, SPECT, SPECT/CT, and PET/CT studies

- Image display modes for PET, PET/CT, PET/MR, CT, MR, Planar, SPECT and SPECT/CT data in all orthogonal planes and registered image displays
- Viewer for oblique slices (Slab View) and ability to change slice thickness on the fly
- Fused 3D volume rendering
- Advanced visualization tools supporting 4D TOF data
- Automated and Interactive multimodality 3D co-registration
- Quantitative 2D and 3D measurement tools (SUV)
- 3D ROI generation for tumor segmentation
- Layout editor for user customizable review layouts
- Image and curve manipulation tools
- Saving ROIs as DICOM RT for export to radiation treatment planning systems

NM Review application provides multimodality co-registration tools for automated 3D registration of multimodality studies (PET, SPECT, CT and MR). The following automatic co-registration methods are supported: Mutual information, cross correlation, and local correlation. It also supports an interactive registration method based on fiducial points selected by the user

Prerequisite: Intellispace Portal V5 or higher

17

Pre-Fetch

1

The IntelliSpace Portal Prefetch option automatically retrieves the previous studies of new exams that are planned or arrived to the Portal system. The IntelliSpace Portal queries 1 or more predefined remote devices (typically PACS) for the previous studies. In this case Prefetch will transfer the previous studies into the local folder to which the new study arrived, saving the technologist and clinical time waiting for studies to arrive using strictly manual DICOM query/retrieve.

The decision which studies to Prefetch are based on predefined rules, that are configurable by user.

The following types of pre-fetch are supported with IntelliSpace Portal v5.0:

- Auto-Prefetch via the Scheduled Worklists on the RIS (i.e. DMWL)
- Prefetch based on the New Study Arrival (i.e.: When a new Study of a Patient arrives at a Portal, his priors would automatically be retrieved from PACS).
- Manual Prefetch: User can do a manually by clicking on a Study to fetch the priors.

Prerequisite: Intellispace Portal V5 (or higher) or IX workstation

18 Medrad Stellant ISI Interface Unit 1
 Medrad Stellant "ISI Interface Unit: Medrad Catalog # 3010434 The Medrad Stellant "ISI" Interface Unit provides the needed interface between the Stellant CT Injector and the SAS Option of the Brilliance CT Scanner.

19 MEDRAD STELLANT D CT INJECTOR - PED SYS 1 0

Medrad Stellant D CT - Dual Syringe - Pedestal System:

Medrad Catalog # SCT 211

The Stellant D CT Injection System is comprised of the injector head located in the screening room and a touch screen Display Control Unit (DCU) and Base unit, which is typically located in the control room. The three components are connected by a communication link.

Control console system with Dual 200 ml variable speed injector head with automatic docking, Auto Advance and Auto retract. Includes touch screen display input, 75 ft. cable to control console, injector head Pedestal mount, operation manual and two 200 ml syringe kits.

Philips representatives are responsible for the unpacking, assembly and installation of the CT Injector equipment. Medrad will be available for technical assistance, by phone: call (412) 767-2400. Medrad will also provide an operational checkout, final calibration, in-service of the equipment and initial applications training. Please contact the local Medrad sales office at least two weeks in advance to schedule installation. Call (412) 767-2400.

Philips does not warranty the Medrad Stellant CT Injector System but will pass on the Medrad warranty. Medrad warrants each new injector system; including control unit, display control, remote panel and injector head sold in North America and Europe against defects in material and workmanship, under proper, normal use and service for a period of one year (12 months) from the date of installation. There will be no charge for any action deemed necessary by Medrad, including parts, travel, or labor to fulfill the terms of the warranty, during normal business hours (8:30am to 5:00pm, local time, Monday through Friday, except holidays).

Not compatible with PQ/UltraZ/Mx8000 injector Interface. NOT compatible with MCT8651 SAS Spiral Auto Start on Mx8000

20 Medrad Stellant Mobile Mount Accy 1

Medrad Stellant Mobile Mount Accy.
Medrad Catalog # SMM 700

The Stellant Mobile Mount Accy. is comprised of mounting hardware to mount the Stellant CT Injector in a Mobile environment.

- 21 Airfare to Cleveland for Biomed Training 1**
Includes one (1) participant's airfare from North American customer location to the Cleveland Training Center (CTC) in Cleveland, Ohio. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced. Expires one (1) year from the earlier of equipment delivery date or purchase date.
- 22 Food Transpt Lodging for Cleveland Biomed Training 14**
Includes one (1) day of modest lodging, ground transportation, and meal expenses in Cleveland, Ohio for one (1) attendee. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced. Although this part is only for one day, it is sold in multiple quantities to account for entire length of course. Expires one (1) year from the earlier of equipment delivery date or purchase date.
- 23 NM3197 Gemini TF TruFlight CTC14 1**
DESCRIPTION:
Complete PET system, Table and Gantry Separation Unit overview, lectures, labs and troubleshooting. Certified to be first on call for the CT portion of a Gemini system (able to perform basic system operations, calibration and general troubleshooting).
- PREREQUISITES:**
Knowledge of:
- General computer knowledge , Basic networking knowledge , Basic mechanics
 - Completion of the NM9113 PET Fundamentals e-learning, Completion of NM3188 or CT3810 or CT3809 or CT3815 or CT3819 or CT1020 or CT9107
- COURSE OBJECTIVES:**
After completion of this course, the learner will be able to:
- Demonstrate the appropriate system safety techniques
 - Describe the Pet System Data Flow and PCB theory
 - Describe the installation of the Gemini Series System
 - Calibrate the Gemini Series System
 - Troubleshoot the Gemini Series System
- * PHILIPS PROPRIETARY MATERIALS SUCH AS DIAGNOSTIC SOFTWARE AND SERVICE DOCUMENTATION ARE NOT INCLUDED IN THE TRAINING AND WILL NOT BE AVAILABLE FOR USE OUTSIDE OF THE TRAINING ENVIRONMENT. THE TRAINEE MUST RETURN ALL PROPRIETARY MATERIALS RECEIVED DURING THE TRAINING AT THE END OF THE TRAINING. CUSTOMER ACKNOWLEDGES AND AGREES THAT NEITHER CUSTOMER NOR TRAINEE WILL RECEIVE A LICENSE TO SUCH PROPRIETARY MATERIALS AND THAT THE TRAINEE MAY NOT BE ABLE TO FULLY UTILIZE THE TRAINING WITHOUT THE USE OF SUCH PROPRIETARY MATERIALS. (CERTAIN LICENSES MAY BE OBTAINED THROUGH PURCHASE OF SUPPORT OR ASSIST AGREEMENT.) Course dates and location to be finalized by Philips. Philips shall attempt to accommodate Customer requested dates and training location.

The price quoted includes course tuition. Travel and living expenses are not included, but may be purchased separately through Philips.

IMPORTANT Notes Regarding Admission to Philips Customer Engineer Training Courses:

1. Trainee must meet all prerequisites
2. Course expires one (1) year from equipment installation date (or purchase date if sold separately)
3. Customer must sign Philips Nondisclosure statement
4. Trainee must sign Philips Nondisclosure statement
5. Customer must sign Philips terms and conditions of training

24

ICAP Portal Entitlement

1

Intellispace (Thin Client Portal): Initial Handover On-Site Education:

The Philips Clinical Education Specialist will provide one twenty-four (24) hour session of onsite, initial handover education to the Principal User. The Principal User will be designated by the facility, and will spend the entire twenty-four (24) hours with the Clinical Education Specialist. It is recommended that the Principal User have experience in the primary modality (NM) to be used by the facility and, possess knowledge of the clinical workflow of the department. The education will cover the fundamentals of image manipulation and processing associated with the specific software (application packages) purchased. The Principal User is responsible for reading, and adhering to, the Philips clinical education guidelines that are provided during the scheduling/enrollment process and before the Clinical Education Specialist arrives at the facility. The Principal User is also responsible for coordinating and organizing the participation of physicians in sessions of 2 – 4 hours with a maximum of 2 physicians per session. ASRT CEU credits may be available for each participant that meets Philips Guidelines. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Intellispace (Thin Client Portal): FollowUp On-Site Education:

The Philips Clinical Education Specialist will provide one twenty-four (24) hour session of advanced onsite education and support to the Principal User, and to any additional staff (up to 2) that may require education in the primary modality (NM) used by the facility. The Principal User will be designated by the facility, and will spend the entire twenty-four hours with the Clinical Education Specialist. The Principal User is responsible for reading, and adhering to, the Philips clinical education guidelines that are provided during the scheduling/enrollment process and before the Clinical Education Specialist arrives at the facility. ASRT CEU credits may be available for each participant that meets Philips Training Guidelines. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Intellispace (Thin Client Portal): Advanced Follow Up On-Site Education:

The Philips Clinical Education Specialist will provide one additional twenty-four (24) hour session of advanced onsite education and support to the Principal User, and to any additional staff (up to 2) that may require education in the primary modality (NM) used by the facility. The Principal User will be designated by the facility, and will spend the entire twenty-four hours with the Clinical Education Specialist. The Principal User is responsible for reading, and adhering to, the Philips clinical education guidelines that are provided during the scheduling/enrollment process and before the Clinical Education Specialist arrives at the facility. ASRT CEU credits may be available for each participant that meets Philips Training Guidelines. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

25

ICAP Upg Portal Entitlement

1

Clinical Education Program for IntelliSpace Portal DX/HX/EX Server Upgrade or Conversion V4 to V5:

Intellispace Handover Education: Clinical Education Specialists will provide twenty-four (24) hours of Multi-Modality OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEUs are not available in all cases. Please read Guidelines for more information, which will be provided to you during the scheduling process.

Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). **Ref # 718-120208**

- | | | |
|-----------|---|----------|
| 26 | Third Party Item Medical Coaches Proposal #
12-124GAS | 1 |
| | Medical Coaches Philips Gemini Mobile PET/CT Semi-Trailer. | |
| 27 | Third Party Item Hot Lab products for coach
from Gartzke | 1 |
| | Gartzke Products Hot Lab Equipment for mobile coach. | |