TRADE IN

VAMC PITTSBURGH, PA
PO# 646-B32024

Line #	Description	Qty
1	**TF Big Bore PET/CT**	1

The GEMINI TF Big Bore is an integrated PET/CT system designed to perform high quality oncology, cardiac, and neurology PET/CT procedures. In addition, it is the world's first large bore (>80cm) PET/CT system and is designed for the unique requirements of radiation oncology. The system automatically combines functional PET and CT images to provide a comprehensive metabolic and anatomic patient assessment. The CT subsystem provides attenuation correction for PET and functions as a fully featured standalone diagnostic CT system.

PET/CT System Highlights

- The proven radiation oncology and diagnostic imaging capabilities of the Brilliance CT Big Bore system
- The exclusive TruFlight time-of-flight (TOF) PET performance of the GEMINI TF, enabling exceptional image quality, low dose imaging, and fast scans
- The exclusive OpenView gantry design featuring an 85cm PET/CT bore size and open gantry designed reduce patient claustrophobia and facilitate clinical access
- A patient table designed for the workflow and precisional accuracy requirements of radiation treatment planning
- A flexible and powerful PET/CT user environment to support efficient clinical workflow

CT Subsystem
The Brilliance CT Big Bore subsystem is perfectly balanced, combining power and flexibility that maximizes image quality, speed and throughput while lowering patient dose. Key features include:

- 85 cm bore size with 50 or 60 cm diagnostic scan field of view and 70 cm extended field of view for attenuation correction
- 16-slices per revolution for large volumes and thin slices -- exam, after exam.
- Philips MRC X-ray tube with legendary reliability and nearly instantaneous cooling.
- DoseWise design delivers optimal dose efficiency, without compromising image quality.
- ScanTools and ScanTools Pro to optimize productivity, workflow, and diagnostic confidence.

Generator
The Brilliance generator uses modern, 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

MRC X-ray Tube
The exceptional heat management demands of multislice imaging calls for an exceptional 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.
- Absolute noiseless design calms patients.
- 2nd generation of MRC tube technology built on proven record of performance and reliability
- Dynamic Focal Spot (DFS) doubles the data sampling density from the detectors in axial and spiral scanning.
- Equivalent Heat Storage Capacity: 26 MHU
- Anode storage capacity: 8.0 MHU
- Maximum cooling rate: 1608 kHU/min
- Focal spot (IEC): 0.5 mm x 1.0 mm (small), 1.0 mm x 1.0 mm (large)

Detector
Detector design is fundamental to the objective of acquiring high quality images while minimizing patient dose. Unlike single matrix detectors that simply sum elements, 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 – GOS
- Slip Ring: Optical - 2.5Gbps transfer rate
- Slice Collimation: 16 x 0.75mm, 16 x 1.5mm, 8 x 3.0mm, 4 x 4.56mm, 2 x 0.612mm

CT Image Quality

- High mode spatial resolution: 15 lp/cm @ cut-off
- Standard mode spatial resolution: 12 lp/cm @ cut-off
- Noise: 0.27% measured on Philips system phantom (21.6 cm water equivalent)
- Low Contrast Resolution: 4.0 mm @ 0.3% as measured on the 20 cm CATPHAN phantom
- Absorption Range: -1024 to +3072 Hounsfield units

Spiral Scanning

- Multiple contiguous slices acquired simultaneously with continuous table movement during scans.
- Multiple, bi-directional acquisitions
- Spiral exposure: Up to 120 sec. of uninterrupted spiral scanning
- Spiral pitch: 0.0413 to 1.7 (user selectable)

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

Scan Times
0.44, 0.5, 0.75, 1, 1.5, 2 seconds for full 360° scans

CT Clinical & Productivity Tools

- Scan Tools: Advanced components and productivity features to make workflow smooth and easy
- Scan Tools Pro: a supplemental set of tools that improve productivity, workflow, and diagnostic confidence even further. Scan Tools Pro includes features like Split Study, Prefetch Study, Automatic Procedure Selection, Bolus Tracking, Spiral Auto Start, Organ ID, CD Writer, and Dual Monitor Configurations.

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. Brilliance CT systems employ a number of features that help provide extremely high dose efficiency:

- DoseRight ACS (Automatic Current Selection)
- DoseRight D-DOM (Dynamic Dose Modulation)
- DoseRight Z-DOM (Longitudinal Dose Modulation)
- Dose Displays
- Dedicated Pediatric Protocols

PET Subsystem
The GEMINI TF Big Bore includes advanced PET technology that delivers excellent performance. Key features include:

- Time-of-flight PET imaging precisely localizes each PET annihilation event to dramatically improve image quality, especially for large patients
- TruFlight PET architecture: optimized for time-of-flight imaging and provides excellent conventional

PET performance

- Exceptional sensitivity for fast scans, low dose imaging, and advanced applications
- High resolution for lesion detect ability and exceptional anatomic detail

PET Detector System

- Crystal Material: LYSO
- Crystal Size: 4x4x22mm
- Detector Architecture: PIXELAR continuous light guide
- Axial field of view: 18cm
- Electronics sampling: 25 psec

Acquisition modes

- Fully 3D acquisition
- Static or dynamic acquisition
- Single or multiple bed positions
- All data acquired and processed in list mode

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. Reconstruction is concurrent with acquisition to ensure efficient workflow. Attenuation corrected and non-attenuation corrected images are reconstructed. 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.

Patient Handling

Patient Table
The patient table is a compact mechanism, designed to meet the demanding positional accuracy requirements of radiation oncology applications. Key features include:

- 227 kg (500 lb) patient weight capacity
- 190cm scan range for PET and CT
- 47cm of vertical travel
- Integrated 53cm flat radiation oncology flat tabletop, compliant with the Varian Exact Indexed Immobilization positioning system, accommodates immobilization accessories to enable consistent patient positioning between treatment planning and treatment delivery.
- Easy operator swap between standard flat tabletop and optional curved patient pallet
- Power assisted float mode operation for CT Fluoroscopy

Table accessories
The GEMINI TF Big Bore Comfort kit is a collection of customized padding, supports, and accessories designed to prevent patient fatigue and discomfort and to give both patients and technologists a sense of security.

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

- 85cm patient aperture diameter for PET and CT
- 300 mm OpenView gantry separation with additional 580 mm separation for interventional access
- Scan Control Panels: 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.
- Intercom: Two-way intercom allows patient monitoring and communication.
- 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.

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.

Guided Flow
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.

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

Surview Plan
Planning via interactive mouse control of multiple, independent acquisition series on Surview image

Expert Protocol Planning
A library of optimized PET/CT factory acquisition and reconstruction protocols help to maximize image quality and workflow across a broad range of clinical applications. Included are dedicated radiation oncology protocols, developed in collaboration with top cancer centers, which provide simplicity for the CT sim therapist and facilitate optimal clinical results. Factory protocols can be modified for further customization.

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

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.

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.

Control Room Computers

- Acquisition Computer (PET, Diagnostic CT, & PET/CT data acquisition): Windows XP Dell computer with dual 19” flat panel color monitors
- PET/CT Host Processing Computer (PET/CT data processing & viewing): Windows XP Dell computer with a 19” flat panel color monitor, DVD-RAM archive device

Clinical Applications

Tumor LOC
The Brilliance Tumor Localization package provides CT segmentation and localization functionality directly on the CT display console. The package provides tools to assist in isocenter localization, treatment volume(s) evaluation, and simple CT Simulation. In addition to standard CT studies, these tools are available for respiratory correlated CT studies. Visualization capabilities within the Tumor LOC package include the generation of Digitally Reconstructed Radiographs (DRR), Digitally Composited Radiographs (DCR), and Multiplanar reformatted images (MPR). Additionally, the package provides the ability to manage different window/level settings to aid in generating the best images possible. Special visualization tools for respiratory correlated CT scans are also included.

Features and capabilities provided by the Tumor LOC software include:

- Contour-Based Segmentation Package: Consists of drawing and editing tools for drawing contours and maintaining groups of contours used in hand segmenting CT image data. Tools also exist for interpolation functions for automatic and semi-automatic segmentation. Automated generation of an external contour can be preselected as a user defined preset.
- Virtual Fluoroscopy using orthogonal beam divergent DRR’s for isocenter and beam border placement.
- Interpolate algorithm provides interactive, shape based interpolation. A Smart algorithm fills in any number of irregularly contoured slices, Interpolated contours may be edited, accepted or rejected.
- Isocenter Management: Isocenter menu to support and manage multiple isocenters. Supports the generation of separate isocenters for multiple target volumes or general regions. Marked and final Isocenters are reported and displayed in the Localization package for easy confirmation of a physical simulation session. A record of the simulation session may be printed on a standard printer.
- DICOM Connect (If configured): RT Plan can easily be exported to the laser system for a more streamlined marking procedure. Tumor LOC is only compatible with LAP CT-4-3 lasers.
- Isocenters and structure sets can be transmitted to a compatible RTP System capable of receiving DICOM RT structure set, plan, and RT Image.
- 2D Image Analysis: Enables viewing of the data exactly as it was acquired, prior to any interpolation and with no preprocessing.
- Markers: Permits the display of a fixed marker (cross hairs, axis or grid) on the screen as an ai d in isocenter marking, or image positioning.
- Screen Annotation: Allows the operator to toggle selected screen annotations on and off.
- Archive: Allows the user to archive a patient study from disk onto selected archive media.
- Information: Displays the study's original scan information, including the number of slices in the study, slice thickness, etc. Can be displayed at any time during an analysis.
- Control of Window/ Level: Allows adjustment to achieve optimal viewing parameters
- Measurement Package: Provides the density value (in Hounsfield units) of a particular point on an image. Computes distances along straight lines.

Special visualization tools for respiratory correlated CT scans allow visualization of organ motion and assist physicians in determining the best treatment:

- Import of multiple phase datasets as well as a routine CT
- Contour on any phase and apply it to a chosen primary phase
- Dynamic DRR/DCR
- Dynamic MPR & Axial
- Maximum, minimum, and average intensity projection dataset generation.

The separate CT Reporting option is included for producing a hardcopy or softcopy summaries of results.

PET/CT Pulmonary Toolkit
Philips' PET/CT Pulmonary Toolkit enables the user to trigger a scan at a particular breath level (axial and/or spiral CT prospective gating and PET prospective gating) or scan the thorax at different pulmonary phases (spiral CT retrospective and PET retrospective) and reconstruct the image data from those phases, minimizing artifacts caused by respiratory motion. Philips PET/CT pulmonary toolkit gives the clinician tools to consistently reproduce similar respiratory conditions over multiple exams when it is important to visualize tumor characteristics in the same respiratory phase where radiation therapy will later be delivered.

By matching the scan phase with the treatment phase the clinician can be assured of providing the CT simulation plan that delivered the highest tumorcidal dose while maximizing the amount of healthy tissue that is spared. It will also allow multi-phased studies to be imported into a therapy planning system. The user can calculate dose and view the dose curves on different phases of the same anatomy. The toolkit includes:

- PET/CT acquisition protocols for CT and PET gating
- Prospective CT gating triggered by an external respiratory device on a pre-selected phase (axial and/or spiral)
- Retrospective Tagging enabling ultra low pitch spiral CT acquired and correlated to the respiratory phase of an external respiratory device
- Prospective and retrospective PET gating and data acquisition
- Respiratory correlated attenuation correction for PET reconstruction
- SUV calculations using respiratory gated image data
- DICOM export of reframed static data for CT and PET
- Storage of respiratory waveform
- Pulmonary Viewer: a dedicated software package to aid the clinician in making radiation therapy treatment planning decisions. Pulmonary Viewer provides the ability to visualize one or multiple respiratory phases, analyze and determine extent of motion, and review the patient’s respiratory waveform. The comprehensive set of user tools includes cine mode with adjustable speed for visualizing motion over time and interactive slab-MIP tools.
- Bellows pulmonary gating device: a pneumatic mechanism placed around the patient's chest, dynamically observing changes in pressure caused by motion of the chest with a transducer linked to the scanner.
- Mayo Device patient feedback device: this device was developed by Mayo Clinic and provides intuitive visual feedback to patients on their respiratory cycle. This feedback can be used to coach patients to better manage their breathing during examinations. The feedback device is only compatible with the Bellows gating device.

- Cables and brackets for connecting to the Varian RPM pulmonary gating device. The Varian RPM device itself is not included and must be purchased separately from Varian. Compatible with Varian RPM version 1.7.

Connectivity & Archiving

Networking
Network connections should be located within 10 feet of the console. The system 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
The system'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 Set Storage

Archiving
Image archiving is organized according to the DICOM 3.0 hierarchical model, in a DICOM 3.0 compliant image format. Images can be archived to a variety of DICOM 3.0 compliant storage devices and printers, as well as DVD-R and DVD-RAM media.

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

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 GEMINI TF Big Bore PET/CT

PET/CT:

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.

CT Oncology:

Pre-Handover OnSite Education - Oncology: Philips Clinical Education Specialists will provide twenty-eight (28) hours of education for up to three (3) dedicated Therapy staff members. This training will encompass all aspects of data acquisition for CT Simulation with the GEMINI TF Big Bore and Tumor LOC. CEU credits may be available if the participant meets the Philips Guidelines. Schedule patients (if applicable) based on Training Guidelines. Note: Site must be patient-ready and the scanner must be accepted for clinical use. If patients will not be scheduled the site must provide a Rando phantom for scanning/training. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Handover OnSite Education: Clinical Education Specialists will provide twenty-four (24) hours of education for up to three (3) dedicated Therapy staff members, selected by customer. This course covers general to advanced oncology scanning for CT Simulation, Tumor LOC and Respiratory Correlated Imaging. Schedule patients based on Training Guidelines. CEU credits may be available if the participant meets the Philips Guidelines. Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Follow-Up OnSite Education: Clinical Education Specialists will provide twenty-four (24) hours of education for up to three (3) dedicated Therapy staff members, selected by customer. This follow-up education will be an overview of general to advanced scanner use, Tumor LOC and Respiratory Correlated Imaging, or can be customized based on the customer's needs. CEU credits are not available for customized training. Note: Philips personnel are not responsible for

actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Additional Recommendations:

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.If CT Cardiac option is purchased, it is recommended that 98981292425 (CT Cardiac OffSite Educ 28h) and 989801292078 CT Full Travel Pkg. is purchased as well as 989801292238 (CT Cardiac OnSite Educ 16h) or 989801292450 (CT Cardiac OnSite Educ 24h). If PET Cardiac is purchased, it is recommended that 989801292276 (PET Cardiac OnSite Educ 16h) also be purchased. To assist customers who are being cross-trained into CT, a reference book, 989801292077 (CT Cross Trainer Course) should also be purchased.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). **Ref# 507140139730194080-120315**

2 **GEM TF Big Bore Local Kit-ENG** **1**

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

3 **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).

4 **ECG Monitor - English** **1**

5 **Automatic Registration Tool** **1**

The Automatic Registration Tool provides 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.

NOTE: The Automatic Registration Tool requires the Philips fusion viewer.

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 GEMIN 3.5 software release.

6 **Mass Storage Peripheral** **1**

2 TB RAID peripheral provides extended storage capacity for both raw and image data. Allows simple storage and retrieval of data in an affordable solution.

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 GEMIN 3.5 software release.

7 **Curved Pallet, GEMINI Big Bore** **1**

Designed for diagnostic CT and PET/CT studies, the curved pallet option for the GEMINI TF Big Bore is interchangeable with the flat radiation oncology patient pallet. This option includes a wall mounted storage rack.

8 **Off-table Head Holder** **1**

The off-table head holder is used with the curved pallet for imaging of the brain for both PET and diagnostic CT studies. The head holder positions the head and neck extended off the table with the patient in the supine position for optimal imaging.

9 **UPS, 125 kVA/480 V/60 Hz** **1**

Uninterruptible Power Supply (UPS) with Voltage Regulator. Provides power to permit up to 30 minutes of scanning after a power failure. This allows the user to complete the patient scan, save data and make an orderly system shut-down. Also insures that incoming power meets Philips Healthcare's specifications for optimal PET/CT system reliability and performance. The UPS regulates utility voltage deviations, stabilizes line frequency, and subdues line voltage surges & spikes, prevents loss of phase and total power outages, while also ensuring positive phase rotation.

Input voltage: 480 VAC/60 Hz.

Refer to Planning Reference Documentation for more details.

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 **GEMINI TF Big Bore Pre-wiring Kit** **1**

GEMINI TF Big Bore PET/CT Pre-wiring Kit

12 **Floor Pour Kit, GEMINI TF Big Bore** **1**

Floor Pour Kit, GEMINI TF Big Bore

13 **GEMINI TF 100 uCi Solid Source** **1**

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

14	**Point Source Disk, 10UCI, NA-22**	**6**
15	**Computer Table**	**1**

Computer Table, for the Brilliance Console or the Extended Brilliance Workspace, provides a large enough working space (120cm) to accommodate dual monitors and other peripheral devices.

16	**Operator's Chair**	**1**

One (1) standard height operator's chair.

17	**Mattress Pad**	**1**

Mattress pad for Brilliance family patient tables.

18	**CT Brilliance Ess Add OffSite 28h**	**2**

Philips will provide one (1) lead technologist, as selected by customer, with in-depth lectures covering basic clinical applications, Philips-specific imaging techniques, protocol optimization and scan parameters. A Brilliance CT "system emulator" is used during the lab sessions to simulate all basic scanning operations without x-ray exposure. Students will graduate from this class with an 80% understanding of the base system functionality. The remaining 20% is covered during an OnSite experience. This twenty-eight (28) hour class is located in Cleveland, Ohio, and is scheduled based on your equipment configuration, geography, and availability. Due to program updates, the number of class hours is subject to change without notice. Customer will be notified of current, total class hours at the time of registration. If purchased with a system, this class is a prerequisite to your equipment handover OnSite Education, and should be attended no earlier than two weeks prior to system installation. ASRT CEU credits may be available for each participant that meets the Guidelines provided by Philips during the scheduling process. Travel and lodging are not included, but may be purchased through Philips. It is highly recommended that 989801292078 (CT Full Travel Pkg OffSite) is purchased with all OffSite courses.

19	**Full Travel Package for OffSite Training**	**2**

Includes one (1) participant’s airfare from North American customer location to Cleveland, Ohio, with modest lodging, ground transportation, and meal expenses. Breakfast/dinner provided by the hotel, and lunch/breaks are catered by Philips. 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.

20	**Turnkey Operation**	**1**

Turnkey Proposal

21	**Trade in Allowance**	**1**

Customer represents and warrants that (i) Customer has, and shall have when title passes, good and marketable title to the equipment being traded in and (ii) has the authority to effect such trade in.

Product: 100550.000 Gemini TF 64
Serial Number: 7044
Manufacturer: PHILIPS HEALTHCARE

Trade-In authorization number: 29282

De-install Date: Not later than 180 days after receipt of Order

Customer will be trading-in equipment that is described on the attached System Disclosure Form (the “Trade-In”), which Trade-In the parties agree (i) will be removed on the De-install Date and (ii) is currently in the condition as represented on the System Disclosure Form. In addition, the parties agree as follows:

1. Customer represents and warrants that Customer has good and marketable title to the Trade-In as of the date of this Quotation and will have good and marketable title when Philips removes the Trade-In from Customer's site (the “Removal Date”);
2. Title to the Trade-In shall pass from Customer to Philips on the Removal Date, unless otherwise agreed by Philips and the Customer;
3. Notwithstanding anything to the contrary in any Business Associate Addendum, Customer represents and warrants that as of the Removal Date all Protected Health Information will have been de-identified or removed from the Trade-In;
4. Philips may test and inspect the Trade-In prior to de-installation. If the condition of the Trade-In is not substantially the same on the Removal Date (ordinary wear and tear excepted) as it is identified on the System Disclosure Form, then Philips may reduce the price quoted for the Trade-In;
5. If the removal date is delayed until after the De-Install Date, unless Philips causes the delay, then Philips may reduce the price quoted for the Trade-In by six percent (6%) per month.
6. Philips is responsible for normal de-installation costs of the Trade-In.
7. The trade-in value will not include costs associated for any facility modifications and/or rigging required for de-installation and must be accounted for separately.
8. Customer is responsible for all plumbing necessary to properly drain coolant from chiller system and cap the lines.
9. Prior to the Removal Date, Customer shall remove from the room all equipment that is not being de-installed.

OPTIONS

SELECTION OF ANY OPTION WILL INCREASE THE CONTRACT PRICE BY THE AMOUNT SHOWN IN THE PRICE COLUMN. OPTIONAL EQUIPMENT PRICING VALID ONLY IF PURCHASED IN CONJUNCTION WITH EQUIPMENT QUOTED.

Line #	Description	Qty
1	**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.

2	**Food Transpt Lodging for Cleveland Biomed Training**	**10**

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.

3	**CS3420 IntelliSpace Portal 4.0 CTC5**	**1**

Course Number: *CS3420*

Course Title: *IntelliSpace Portal 4.0*

Course Length: *4 days* (excludes Saturdays, Sundays, and Philips holidays)

Delivery Method(s): *Instructor-Led*

Modality: *HI*

DESCRIPTION: *The IntelliSpace Portal is a multimodality thin-client applications server that turns virtually any PC into an advanced multimodality imaging system workspace that can support radiology, cardiology, oncology and other specialties' imaging needs. This course will allow the student to experience the pre-installation, installation, local and remote service activities in an Instructor-Led environment.*

PREREQUISITES: *None*

COURSE OBJECTIVES:

- *Given the PRD information, the student will complete the pre-installation and site planning activities required for a successful implementation of the IntelliSpace Portal product. Given the system installation manual, the student will successfully complete an installation of the IntelliSpace Portal hardware in the hospital setting. Given the server software installation manual, the student will successful complete a software installation of the IntelliSpace Portal software. Given the system documentation, the student will be familiar with the various system configurations and the responsibilities of both the customer and Philips. Given the Safety Guideline document, the*

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student will recognize the proper safety issues and hazards. Given a functional Portal, the student will demonstrate using the application on a technical level and to the extent to properly show the customer basic functionality. Given a set of prescribed issues on an IntelliSpace Portal, the student will recognize and solve the problem with each issue. Given the Repair and Replacement manual, the student will detect the field replaceable units (FRUs) that are pertinent for the IntelliSpace Portal 4.0. Given the Service Tools Users Guide for IntelliSpace Portal, the student will set up the LAN Configuration utility with the required DICOM nodes for a complete system installation. Given a functional IntelliSpace Portal system, the student will complete the System Customization tasks including setting the preferences and recognizing the auto-delete procedure. Given a functional IntelliSpace Portal system, the student will simulate all the System Administration tasks including Network Settings, Remote Portal Management, Disk Defragmentation and Disk Check, and Automatic Security Updates. Given the Remote Service User Guide, the student will simulate the remote service activities including SFTP, Secure Telnet, and Remote Desktop, PSA Configuration and M2M components – among other tasks. Given the Service Tools User Guide, the student will demonstrate use of the BugRep Tool, Log Viewer and Configuration tools and LAN Configuration via the Service Tools Framework. Given a Philips Service laptop, the student will demonstrate use of the PMS Processes and Tools including InCenter, Knova, e-SPF, RSN and communicating with the Business Unit.

* 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 A PHILIPS RIGHTFIT SERVICE 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

4 **NM8006 Bio Gemini TF BigBore Diff CTC 5** **1**

The Gemini TF Big Bore is the latest in the Gemini series of hybrid PET-CT scanners. The Big Bore technology is designed for oncology care. This course is intended to add the new Big Bore technology to the Gemini Time of Flight (TF) system. This is a 5 day course which provides hands-on training with lecture and lab sessions for the Gemini TF Big Bore scanner to the following degree:

- PET sub-system: Differences from previous Gemini TF systems.
- CT sub-system: Imaging chain differences.

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- Table sub-system: Comprehensive training for installation, troubleshooting, repair, calibrations, and preventative maintenance to the TG66 specifications
- Gemini system: Training for the differences in the installation, troubleshooting, repair, calibrations, and preventative maintenance.

Including:

-System Functional Description Skills
-Service Safety Skills
-Service Tools Skills
-Calibration Skills
-Planned Maintenance Skills
-Established Troubleshooting Skills
-Field Replaceable Unit Skills
-Networking/DICOM Skills

Upon completion of the course the student will be able to:
- Identify the different pre-installation tasks required for the Gemini Big Bore system.
- Identify the different system room requirements including power, environment, and room size requirements.
- Identify new steps required to complete a Gemini Big Bore installation, as identified in the service manual
to serve as an assistant to the Installer including:
- System placement using the latest tools identified in the service manual.
- System electrical connections as identified in the service manual.
- Gemini Host / CT Recon and PET Server station interface as identified in the service manual.
- GSU installation and placement as identified in the service manual.
- Table installation and placement as identified in the service manual.
- Perform system power up.
- Perform system cover removal sequence.

PREREQUISITES:
Must be Gemini Level 2-trained FSE:
- NM3185 or, NM3182 and NM8003C, and
- CT3809 or CT3810

Accreditation: None.

Location: CTC; Cleveland, OH, USA.

Class Length: 5 days.

Materials: Student manual and DVD.

* 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

OPTIONS

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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

System Type: Upgrade
Freight Terms: FOB Destination
Warranty Terms: Part numbers beginning with two (2) asterisks (**) are covered by a ninety (90) day product warranty. All other part numbers are third (3rd) party items.
Special Notations: Contingencies must be removed 120 days before scheduled shipment to assure delivery on specified date. Any rigging costs are the responsibility of the Purchaser.
Additional Terms:

Line #	Description	Qty
1	**MM Tumor Tracking**	**1**

Multimodality Tumor tracking application provides efficient tools to assist clinicians in monitoring change in disease status including disease progression or assessment of therapy response using sequential PET/CT, SPECT/CT, MR and CT exams. Multimodality Tumor Tracking performs automatic segmentation of target lesions and quantifies results over time. It provides automatic and standardized measurements of tumor progression including tumor burden calculation based on RECIST, WHO & PERCIST standards.

Prerequisite: Intellispace Portal

2	**ICAP Portal Entitlemnt**	**1**

Initial Handover Education: The Philips Clinical Education Specialist will provide twenty-four hours of initial handover education to the Principal User over a scheduled period of time. Philips will provide a Clinical Education Project Manager who will provide a customized training plan of up to 48 additional hours based on your implementation and workflow. A Principal User for each modality who possesses knowledge of the clinical workflow will be designated by the facility. The education will cover the fundamentals of image manipulation and processing associated with the specific software (application packages) purchased. The Principal User(s) is responsible for reading, and adhering to, the Philips clinical education guidelines that are provided during the scheduling/enrollment process and completing the prerequisite on line training modules. ASRT CEU credits may be available for each participant who meets Philips Guidelines.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref#587588589-110412

3	**Customer Note**	**1**

MM Tumor Tracking can be purchased if ISP EX server has already been purchased