VAMC BUFFALO, NY
PO# 528-B30048

Line #	Description	Qty
1	BRIGHTVIEW XCT	1

BrightView XCT Camera with PinPoint detectors with caudal-cephalic tilt- 9.5 mm (3/8") crystal
BrightView XCT is a general-purpose variable angle gamma camera using leading-edge SPECT detectors and CT-based localization and attenuation correction. BrightView XCT provides exceptional flexibility, low dose-high resolution CT localization, flexible breathing protocols with CT-based attenuation correction, enhanced nuclear medicine-centric workflow, and a platform for emerging molecular imaging agents. Integrated CloseUp technologies provide superior ability to maintain close proximity to the patient for optimized resolution.

PinPoint Digital Detectors
PET-based PinPoint technologies include digital detectors and electronics with advanced iterative positioning algorithms.

- 59 Photo-multiplier tubes interfaced to 59 A/D Converters
- Dual NaI, 54 cm x 40.6 cm (21.25" x 16") FOV detectors, 9.5 mm (3/8”) thick crystal
- Enhanced resolution and uniformity detector specifications
- Energy independent performance up to 300 keV
- Useful detector energy range: 56 to 662 keV
- Digital real-time energy, linearity, and uniformity correction

CT-Based Localization and Attenuation Correction
A high resolution flat panel detector and x-ray tube are positioned in the same field-of-view as the SPECT detectors to allow for a highly integrated and compact SPECT/CT system.

- Low dose-high resolution localization
- Volumetric CT coverage of 14 cm in a 12-second breath hold
- Co-planar acquisition to allow CT and SPECT acquisition without table indexing
- Attenuation correction with flexible breathing protocols (breath hold or tidal breathing)
- Sub-mm isotropic voxels for optimized oblique angle viewing
- Nuclear Medicine centric workflow allowing planning of the CT from the P-scope
- Folding storage of the flat panel detector inside the system gantry, when desired
- Reconstruction computer (x86, dual 2.33 GHz Intel Quad Core Xeon, 4 GB DDR2 memory, nVidia 8800 GTX with 768 MB DDR3 memory)
- Minimum of 1250 GB hard disk space for reconstruction computer (250 GB for OS, 1000 GB in RAID 0 configuration for image data)

Highly stable open gantry design
BrightView XCT has an open gantry with 10-axis design to provide exceptional mechanical stability and precise center of rotation. Advanced robotics feature automatic set-up of gantry, detectors, collimators, and patient table for improved workflow; automatic, single button touch for bed imaging, quality control, upright imaging, and other positions.

- CardioTrac: Automated cardiac setup and with tracking zoom electronics to avoid patient truncation
- CloseUp imaging for highest resolution with minimized patient-to-detector distance
- Generous gantry aperture of 91.4 cm (36 inches) for imaging large patients and for unobstructed patient monitoring
- LCD touch screen camera interface on the gantry
- Ergonomically designed, wireless (RF) hand controller
- Caudal-cephalic tilt- +/- 15 degrees perpendicular to the axis of rotation

Auto Body Contouring
BodyGuard automatic body contouring for SPECT and TB applications uses a conductive method (electrical impedance) to “see” the patient and other conductive material, such as the imaging pallet and wet IV lines. User programmable scan distance.

Patient Table
BrightView XCT comes with a general-purpose imaging table with vertical and translation control. It is permanently mounted at the far end of the table from the gantry. The table may be easily pivoted to either side of the room. The table has an open design for easy patient loading, patient restraining, and positioning. The table supports a 227 kg (500 lbs) patient weight limit.

JETStream Acquisition System
The JETStream is a user and site configurable acquisition system with an easy to use graphical user interface. Patients may be pre-scheduled in the JETStream, linked to the desired acquisition protocol with the click of a single button. Other key features include:

- Smart Step: Provides tremendous workflow efficiency with customizable and automatic acquisition setup
- Up to 16 energy windows: Important for multi-radionuclide imaging, advanced scatter corrections, and molecular imaging agents
- Basic Concurrent Imaging: Ability to save a single acquisition step into up to 3 simultaneous datasets (each with independent matrix, zoom, energy windows, gating parameters, stop criteria, and data type) that provide the benefit of improved throughput, optimized image quality, and additional diagnostic data
- 48.3 cm (19") Flat LCD monitor (wall mounted or cart-based)
- Includes keyboard and trackball, or mouse
- Linux server (x86-64, 3.4 GHz Intel Pentium 4, 1 GB DDR2 memory minimum)
- Windows-based user console client. (X86-64 3.2 GHz Intel Celeron D, 1 GB DDR2 memory minimum)
- Minimum of 160 GB hard drive for server (60 GB for image data, 80 GB for list mode data)
- Minimum of 80 GB hard drive for client
- Recordable DVD drive

DICOM Export and Storage Commit are standard.
Compatibility tested with EBW-Nuclear Medicine Applications Suite.
Includes one (1) camera interface cabling and system installation.
Clinical Education Program for BrightView XCT Camera

NM EBW OffSite Education: Philips will provide one (1) technologist, as selected by customer, with in-depth didactic, tutorial, and hands-on training covering basic applications of workstation functionality. This class is a prerequisite to Handover OnSite Education. In order to provide trainees with the ability to apply their new knowledge most effectively, this class should be

attended no earlier than two weeks prior to system installation. This twenty-eight (28) hour class is located in Cleveland, Ohio, and is scheduled based on equipment configuration, geography, and availability. Due to program updates, the number of class hours are subject to change without notice. Customers will be notified of current, total class hours at the time of registration. 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 989801292164 (NM Full Travel Package Offsite) is purchased with all Offsite courses.**

Handover OnSite Education: Philips Education Specialists will provide 28 hours of OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. The first 4 hours onsite will be spent configuring new equipment for specific clinical needs, as well as reviewing important safety features and quality procedures. Course content is intended to provide the framework for operational workflow and clinical applications as they pertain to your site specifically. Students should attend all 28 hours, and must include all Offsite 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.

Additional Handover OnSite Education

: Philips Education Specialists will provide twenty-four (24) hours of OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Course content is intended to provide the framework for operational workflow and clinical applications as they pertain to your site specifically. Students should attend all 24 hours, and must include all OffSite 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 Follow-Up Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. This education is recommended to be scheduled 8 to 12 weeks following Additional Handover Education. Course content is intended to provide continuation of previous week's handover, specifically to offer review and practice with workflow and clinical applications pertaining to the BrightView-XCT Camera. Students should attend all 24 hours, and must include all Offsite and 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: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Recommendations:

To enhance customer satisfaction with the camera and workstation over the first year of use, **an additional FollowUp, 989801292154 (NM Add OnSite Clin Educ 16h)** should also be purchased and scheduled no later than three (3) months after installation. To maximize customer satisfaction with workstation software options, **989801292153 (NM Add OnSite Clin Educ 08h)** should be purchased for options 4DMSPECT, Syntegra, AQMD, AQ Xcelera, and JetPack. To assist customers in maximizing the potential of their workstation, **989801292354 (NM Advanced EBW OffSite 20h)** should also be purchased with corresponding **989801292446 (NM Partial Week Travel Package Offsite).**

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref#351352578353-101215

2 **DICOM Modality Worklist** **1**

DICOM Modality Worklist software for the BrightView camera provides access to patient information using DICOM standard specifications. It enables receiving data from an Information System (i.e., Patient Name, Patient ID, Study Type, Accession Number and Sex) to avoid typing errors, time to type information and gives an update on the patients scheduled for the day.

With DICOM Modality Worklist Management only patient demographics and study identification parameters will be received from a RIS. This functionality does NOT transfer any image data. Current System tested: Mitra PACS Broker, which acts as an interface with most of the RIS systems of the market. For more precise information, an evaluation can be done by the Philips Healthcare Custom Network Department.

NOTE: This is a software-only package; it does not include hardware or remote node software. A TCP/IP network environment must be established and functional including assignment of IP addresses

3 **5.0 KVA UPS Power Conditioner** **1**

5.0 KVA, 200~240 VAC (50/60 Hz) Auto Switch
System provides backup power for Nuclear Medicine procedures only. System does not provide backup power for the x-ray generator.

- APC Smart UPS RT 5.0 KVA , 208V
- Input voltage range of 160-280 V
- Input Frequency 50/60 Hz +/- 5 Hz (auto sensing) and single phase
- Input power is connected to the unit via 30-amp twist-lock plug (L6-30P)
- Two output receptacle (L6-30R) and two (L6-20R) provide 200, 208, 220, 230 and 240VAC (selectable) power
- Self-diagnostics and front-panel status display
- Modular design enables easy usage
- Manufacturer's standard two-year limited warranty

4 **UPS Cable Kit for XCT** **1**

Cables required for the installation of a UPS with a BrightView XCT system.

5 **BrightView XCT Loc Kit-English** **1**

BrightView XCT localization kit includes keyboard, system labels, GUI software, Quick Reference Guide, Release Documents, and electronic copy of User Manual in English

6 **Wall Mounted Acquisition** **1**

BrightView XCT wall mounted flat LCD monitor for the acquisition station

7 **Under Floor Table Cable Kit** **1**

Under Floor Table Cable Install Kit
Brackets and installation kit to allow the BrightView table cable to be installed under the customer’s floor. Customer is responsible for all floor trenching to Philips specifications and any retiling of the floor.

8 **BV XCT Premium Comfort Kit** **1**

Premium patient comfort kit includes:

- Memory foam pallet pad
- Wide Velcro body wrap
- Premium IV pole
- SPECT shoulder support
- Knee support wedge
- Total Body arm boards
- Slicker to improve large patient comfort during pallet indexing

9 **IVY BIOMEDICAL CARDIAC GATE** **1**

IVY Biomedical Cardiac Gate

ECG gating system for Medical Imaging workstation.

System provides 7" CRT display of ECG and trigger indicator with variable gain control that automatically adjusts to individual ECG amplitude.

System includes 6-foot 3 ECG cable.

10 **Ivy Gate Roller Cart** **1**

Roll around cart for IVY Biomedical Cardiac Gate.

11 **XCT LEHR Collimator Pair** **1**

Low-energy (140 keV) high-resolution collimator pair with exchange cart for semi-automatic and simultaneous exchange of both collimators.

12 **XCT MEGP Collimator Pair** **1**

Medium energy (300 keV) general-purpose collimator pair with exchange cart for semi-automatic and simultaneous exchange of both collimators.

13 **XCT HEGP Collimator Pair** **1**

High-energy (364 keV) general-purpose collimator pair with exchange cart for semi-automatic and simultaneous exchange of both collimators.

14 **Intrinsic 4-Bar Phantom** **1**

Intrinsic and extrinsic 4-Bar quadrant phantom: each model contains four sets of lead bars measuring resolution at 0.4, 0.3, 0.25, and 0.2 cm (1/6, 1/8, 1/10, 1/12 inch)

15 **ACR Deluxe Jaszczak Phantom** **1**

Flangeless Jaszczak SPECT phantom to meet requirements set by ARC. Multiple performance characteristics of SPECT systems are evaluated from a single scan of the phantom.

- Cylinder Interior Dimensions: 8" x 7.32" (20.4 x 18.6 cm)
- Cylinder Wall Thickness: 1/4" (6.4 mm)
- Volume: 6.4 L
- Cold Rod Dimensions: 4.8 mm, 6.4 mm, 7.9 mm, 9.5 mm, 11.1 mm, 12.7 mm
- Solid Sphere Diameters: 9.5 mm, 12.7 mm, 15.9 mm, 19.1 mm, 25.4 mm, 31.8 mm

16 **SPECT Phantom Holder** **1**

Carbon fiber pediatric pallet for the BrightView XCT patient table that may also be used as a SPECT phantom holder to allow for close imaging without pallet interference.

- Patient weight capability of 27.3 kg (60 lbs) distributed over 50.8 cm (20 inches)
- 20.3cm and 27.9 (8-inch and 11-inch) wide imaging sections for SPECT imaging

17 **BrightView XCT User Manual-ENG** **1**

Printed English language fully illustrated Instructions for Use manual for BrightView XCT

18 **PASY,GD-153, 100uCi CAPS** **1**

The Gd-153 point sources are used in various calibration procedures for Precedence and BrightView XCT

19 **In-room Control with Lead Shield** **1**

Option for in-room SPECT and CT acquisition control including wall-mounted or floor-mounted foldable lead shield. 1/8”, 8 lbs/square inch, (0.3 mm) lead equivalent. Includes a small shield-mounted CT acquisition console. Can be used in combination with either wall-mount or cart-based JETStream acquisition system. Sensors in folding screen only allow x-ray activity when shield is open and locked. 34” wide x 28” tall (86 x 71 cm) leaded acrylic window. Overall shield height: 6’6” (198 cm); width: 4’8” (143 cm)

20 **EBW NM Standard** **1**

The Extended Brilliance Workspace, Nuclear Medicine (EBW NM) is a comprehensive and scalable workflow solution that integrates SPECT and SPECT/CT processing and advanced visualization tools on a common platform. This powerful yet intuitive processing environment can be tailored to accommodate your specific workflow needs.

• User friendly processing and viewing environment offering a comprehensive portfolio of Nuclear Medicine applications on one workspace
• Powerful platform providing efficient solution to manage large datasets while helping to speed the “time to diagnosis”
• Incorporates Philips' GuidedFlow concepts supporting clinical workflow and ease of use, to help facilitate enhanced productivity
• Maximum flexibility for viewing, performing advanced clinical applications, reporting and archiving
• Scalable platform for growth and future applications, making it a secure, long-term investment

EBW NM supports DICOM or Windows XP 64 bit compatible printers only. Please contact Philips to check compatibility with a specific printer model.

21 **NM Review/Processing** **1**

NM Review/Processing Software provides a comprehensive review, analysis, and processing environment for Planar, SPECT, SPECT/CT, and PET/CT studies on the Extended Brilliance Workspace NM.
The Philips fusion viewer application delivers a workflow focused user interface aimed at streamlining the overall image review and reporting process. Key features include:

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

AutoSPECT supports CT-based attenuation and scatter correction for the following radionuclides: Tc-99m, Tl-201, In-111, Ga-67, I-123, and I-131, Lu-177.

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.

NM Application Suite includes Renal, Lung, Bone /Whole Body, Cardiac (First Pass, Shunt and MUGA), Gastric, Liver, Gallbladder, Esophageal, and Thyroid/Parathyroid, applications. These applications are fully integrated with Viewing, Image and Curve Manipulation tools. The users can invoke these tools "when needed where needed". All applications support "state-of-the-art" protocol and preference management that allows the users to configure their workflow and usability "on the fly".

AutoSPECT Pro provides for SPECT and SPECT/CT reconstruction workflows with a goal of reducing the number of user interactions through protocols. It integrates into one user interface, the following:

- Fast and fully automated reconstruction and reorientation software with motion correction
- SPECT/CT registration and fusion display with alpha-blending and triangulation to facilitate CT AC
- Image review with fusion display

The QA Suite provides a comprehensive set of tools to perform NEMA tests, daily and periodic QA.

AutoSPECT Pro provides for SPECT and SPECT/CT reconstruction workflows with a goal of reducing the number of user interactions through protocols. It integrates into one user interface, the following:

- Fast and fully automated reconstruction and reorientation software with motion correction
- SPECT/CT registration and fusion display with alpha-blending and triangulation to facilitate CT AC
- Image review with fusion display
- AutoSPECT supports CT-based attenuation and scatter correction for the following radionuclides: Tc-99m, Tl-201, In-111, Ga-67, I-123, and I-131, Lu-177.

Includes Cedars heart finding, motion correction, and reorientation algorithms.

23 **Astonish NM Application Suite** **1**

Astonish is a family of advanced reconstruction algorithms to improve image quality in SPECT and Planar data sets by modeling the characteristics of the imaging system and removing the resolution losses due to distance-dependent blurring.

Astonish Features:
SPECT Astonish includes 3-D OSEM reconstruction and resolution recovery with user-controlled noise dampening
SPECT reconstruction is provided for SPECT, gated SPECT and CT based attenuation correction protocols.
SPECT Astonish supports CT-based attenuation and scatter correction for the following radionuclides: Tc-99m, Tl-201, In-111, Ga-67, I-123, and I-131
Planar Astonish incorporates blinded deconvolution for the following protocols; Static, Dynamic, Total Body, and Planar Gated nuclear medicine images.

Astonish Benefits:
Improved image contrast and improved signal to noise ratio with PET-like resolution for sub-5mm resolution for SPECT reconstructed data and sub-5.5mm resolution with planar data.

Astonish Licensing:
Each Astonish license may be used with one JETStream Workspace workstation only.

The license is a stand-alone software application specific to the aforementioned cameras and is not compatible with older style Philips' or non-Philips' cameras.

NOTE: This package entitles the customer to a single Astonish license. This package includes one Astonish license.

NOTE: This package must be purchased for each workstation to be loaded with the Astonish package

24 **AutoQUANT for EBW Sngl License** **1**

AutoQUANT for EBW Single License
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 (Tl-Tl, Dual Isotope, MIBI-MIBI, VantagePro, Astonish, User- Definable)

NOTES:

1. This package entitles the customer to a single AutoQUANT license.
2. AutoQUANT for EBW version is only compatible with the EBW NM.

25 **NeuroQ** **1**

The NeuroQ version 3.5 application provides a comprehensive quantitative analysis tool for brain PET scans:

- Automated analysis and quantification of relative activity in multiple brain regions
- Compares the regional brain activity in an individual scan to activity values derived from a group of asymptomatic control subjects
- Detects clinically meaningful abnormalities of regional brain metabolism
- Powerful tool to assist clinicians with interpretations of brain PET scans

NOTES:

1. For GEMINI TF configurations: This option is only available for the Extended Brilliance Workspace 4.0 and the PET/CT Host (GEMINI TF).
2. The NeuroQ 3.5 application requires the Philips fusion viewer.

26 **Memory Upg 12GB to 24GB** **1**

This upgrade increases the EBW RAM memory to a total of 24GB

Note:
Applicable only to the folllowing EBW-NM HW configurations:

- Dell 5500

27 **Dual Monitor Configuration EBW** **1**

28 **EBW NM Local Kit-English** **1**

29 **EBW NM Addl Manual-ENG** **1**

30 **Full Travel Package for OffSite Education** **1**

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.