

REQUISITION: 621-B93040 STATUS:  
 REQUESTING SERVICE: MEDICINE  
 SHIP TO: VA WHSE BLDG 205  
 VETERANS WAY & LAMONT ST  
 DOGWOOD AVE, BLDG 205  
 MTN HOME, TN 37684

Line #	Part #	Description	Qty	Each	Price
1		<b>EPIQ CVx 3D Ultrasound System</b>	1		
		<p>EPIQ CVx is a new version of EPIQ for premium 3D echo, designed for cardiology featuring an uncompromised level of clinical performance to meet the challenges of today's most demanding practices – the most powerful architecture ever applied to ultrasound imaging – touching all aspects of acoustic acquisition and processing allowing you to truly experience Ultrasound's evolution to a more definitive modality.</p> <p>Supported by our family of proprietary xMATRIX transducers and our leading edge of Anatomical Intelligence, this platform offers our highest level of premium performance.</p> <p>Reinvention of the premium ultrasound user experience</p> <ul style="list-style-type: none"> <li>• New tablet like configurable interface revolutionizes how you interact with the system resulting in a smoother workflow with improved layout and configuration.</li> <li>• Lightest premium system in its class (230 pounds) – 40% lighter than the heaviest competitive premium system.</li> <li>• Infinite articulation of control panel and monitor allows for perfect alignment whether sitting or standing (720 degrees of freedom) to scan ergonomically</li> <li>• Almost silent when running (37-41dB) – equivalent to the sound of a library</li> <li>• 4 transducer ports</li> <li>• Ambient lighting of transducer connectors and the peripheral housing bay</li> <li>• Integrated footrest</li> <li>• Integrated storage shelves</li> <li>• 4-wheel swivel and swivel/brake lock control</li> </ul> <p>The most powerful architecture ever applied to ultrasound imaging</p> <ul style="list-style-type: none"> <li>• Proprietary nSight architecture - a totally new way to form ultrasound images – all without compromise.</li> </ul> <p>The combination of a new precision beamformer and massive parallel processing allow EPIQ CVx to receive and process an enormous amount of acoustic data allowing the system to focus down to the pixel level...all in real time.</p> <ul style="list-style-type: none"> <li>• Up to 7,071,744 total digital channels (xMATRIX configuration)</li> <li>• Up to 4,718,592 total digital channels (non xMATRIX configuration)</li> <li>• Exclusive adaptive signal to noise ratio that achieves system dynamic range of up to 320 dB for improved 2D</li> <li>• Windows 10 Operating System</li> <li>• Philips Next Generation SonoCT Real-Time Compounding, with Widescreen capability and up to 9 beam-steered lines of sight that acquires more information and reduces angle-generated artifacts</li> <li>• Philips next generation XRES Adaptive Image Processing for noise and artifact reduction to improve tissue and border definition</li> <li>• Fully independent, multiple mode Triplex operation</li> <li>• Active Native data for post-processing of frozen image data and Cineloop image data</li> <li>• MaxVue High Definition Ultrasound with over a 1 million more pixels and 38% larger viewing area</li> </ul> <p>Transducers</p> <p>Advanced Compact connector technology offers pinless design for exceptional reliability and performance that feature:</p>			

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		<ul style="list-style-type: none"> <li>• Ergonomic designs with lightweight flexible cables</li> <li>• New low-loss technology for better penetration with fewer artifacts</li> <li>• Breakthrough frequency bandwidths and array configurations</li> </ul> <p>Supports array configurations up to 20 MHz – sector, linear, curved, tightly curved, TEE and xMATRIX volume transducers</p> <p>Automation</p> <p>Designed with our most innovative tools to maximize efficiency</p> <p>Anatomical Intelligence</p> <ul style="list-style-type: none"> <li>• EPIQ CVx supports the full range of 2D and 3D Anatomical Intelligence tools to provide reproducible and reliable results, including HeartModel.</li> </ul> <p>AUTOSCAN (real time iSCAN) automatically optimizes gain while imaging and TCG continuously to assure you are achieving an optimal image in 2D &amp; Live 3D.</p> <ul style="list-style-type: none"> <li>• Intelligent Tissue Specific Imaging</li> <li>• Application-specific and user definable Quicktext Automatic Annotation</li> <li>• QuickSAVE User Defined Programs (up to 45 per transducer)</li> <li>• SmartExam system-guided protocols with new features that include exam record and automatic mode switching to greatly improve workflow efficiencies</li> <li>• Vascular Auto Doppler automatically adjusts color box position and angle, as well as sample volume placement and angle. Also includes Auto Flow Tracking for automatic angle correction with sample volume movements</li> <li>• Vascular High-Q Automatic Doppler provides real-time tracking of Doppler signal, automatically selecting the highest peak velocity and with the touch of a button, adding measurements to your report.</li> </ul> <p>Data</p> <ul style="list-style-type: none"> <li>• Multi Modality Query Retrieve (Allows for the viewing of DICOM CT, iXR, NM, MRI and ultrasound images – you can review these images while you are live imaging)</li> <li>• NetLink/DICOM 3.0 provides network print and store, commit, modality worklist, DICOM Query and Retrieve, and structured reporting for adult and pediatric echo and vascular</li> <li>• DICOM 3.0 Print and Store capability to internal drive or DVD/CD</li> <li>• Integrated Wireless DICOM</li> <li>• On-board workstation-class data management with thumbnail previews and storage of images, loops, and reports</li> <li>• Retrospective and prospective clip capture to internal drive or removable media</li> <li>• Ability to export QLAB native data</li> </ul> <p>Other Core Features</p> <ul style="list-style-type: none"> <li>• Live 3D and xPlane imaging.</li> </ul> <p>Provides a combination of functionality when using xMATRIX transducers in both 2D and Live 3D modes.</p> <p>iRotate: ability to electronically rotate the 2D imaging plane without rotating the transducer. iRotate can be used in 2D and color flow. Live xPLANE: ability to image and acquire 2 orthogonal 2D images. The orthogonal plane can be tilted in the lateral or elevation plane as well as be rotated. Works in 2D and in color flow (all xMATRIX transducers). Live 3D: ability to perform real time Live 3D (dynamic 3D) allowing assessment of structures and its relationship within the anatomy, in greyscale and color Doppler. Zoom functionality optimized for detailed Live 3D imaging of specific anatomic structures. (all xMATRIX transducers). Live 3D Full Volumes: ability to capture a large volume in Live 3D. Designed to encompass the entire heart. Can be performed in greyscale or with color Doppler. Multiple acquisition modes available, from true 1 beat to 6 beats cardiac cycles all with high volume rates. Includes MultiVue; a real-time image alignment feature to improve efficiencies during procedures. (X5-1, X7-2, X8-2t and X7- 2t only).</p> <ul style="list-style-type: none"> <li>• Tissue Doppler Imaging</li> <li>• Coronary sub-mode for 2D and color imaging of coronary arteries (S5-1, S9-2, S8-3, S12-4, X5-</li> </ul>			

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1, X7-2, X8-2t, X7-2t).

- Cardiac Stress Echo, with Defer Selection and Live Compare functions
- 2D, M-Mode, Color Doppler, PW, High PRF PW, CW
- Temporary ID
- LVO Contrast
- Cineloop Image, M-Mode and Doppler Review
- High Definition Write Zoom and Read Zoom with pan features
- Measurement tools including: distance, depth, area, and circumference
- Volume Flow Measurements
- User Defined Calculations
- Application-specific Body Mark selections
- Color Power Angio

#### **Safeguard**

This is a standard computer administration tool used to prevent unauthorized programs (malware) from running on the ultrasound system.

#### **Security Plus**

Security Plus provides a Defense-in-depth strategy implementing security features designed to help healthcare facilities provide additional patient data privacy, and protection from unauthorized access via the ultrasound systems on hospital networks. New data security enhancements will make EPIQ and Affiniti compatible with data security on medical devices. Requires Evolution 2.0 or later. This feature does not include or require SafeGuard (malware protection).

#### **Region of interest Q-App (ROI)**

Designed to increase the consistency and reliability of acoustic measurements while reducing the effort required to successfully perform ROI analysis for contrast imaging, tissue analysis and color Doppler.

#### **Intima Media Thickness Q-App (IMT)**

Provides automated measurements of intima media thickness in carotids and other superficial vessels, and eliminates the need to manually position cursors, minimizing the time needed to complete an IMT study.

#### **Strain Quantification Q-App (SQ)**

Measures the myocardial velocity from Color Tissue Doppler (aka TDI) datasets and derives the displacement, strain and strain rate along user-defined M-Lines; includes ability to overlay opening and closing of aortic and mitral valves on SQ curves to display Left Ventricle mechanical events; and the user-selectable waveform display makes SQ curves easier to read.

#### **DVD Option**

Integrated DVD/CD burning capability for storage of DICOM images or export in JPEG and .avi for PC compatibility.

#### **Clinical Education**

**EPIQ (CV) Clinical Education;** \*\*\*2 days of Implementation Onsite Training (expires 90 days after install, provided Mon-Fri during normal business hours) and an E-Learning subscription; Basic System Training course for two people (expires 180 days after install).

\*\*\*Note: Philips Healthcare personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. The training sessions should be attended by the appropriate healthcare professional as identified by the department director. Repeat training for staff non-attendance will not be accepted. Site must be patient-ready to meet training expectations.

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**If you are purchasing Live 3D with a New System you will receive;** \*1 Day offsite Advanced Customer Training course for one (expires 180 days after install), a 3 Day offsite University (expires 275 days after install), A Post University Integration onsite class (expires 365 days after install), and one subscription to E-Echocardiography.com (must be activated within 90 days of code notification). All offsite training includes travel, see travel disclaimer\*\*

**If you are purchasing Live 3D as an upgrade you will receive;** \*\*\*1 day of Implementation Onsite Training (expires 90 days after install, provided Mon-Fri during normal business hours) and a \*1 Day offsite Advanced Customer Training course for one (expires 180 days after install). All offsite training includes travel, see travel disclaimer\*\*

\*If purchased with 2D Quantification Bundle, offsite advanced customer training tuitions must be used consecutively.

\*\*TRAVEL Disclaimer: Travel & Accommodations for registered attendees. Each tuition includes one (1) participant's airfare from a North American customer location to a Philips North America Ultrasound Clinical Education training location with modest lodging, ground transportation and meal expenses for the course duration. Breakfast/dinner are provided by the hotel and lunch/breaks are catered by Philips Healthcare. All other expenses will be the responsibility of the attendee (ie. Baggage fees, meals while traveling, transportation to and from customer's home airport). Details are provided during the scheduling process. Note: 21 day Cancellation/Rescheduling policy is strictly enforced.

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2		<b>3D Innovation Plus Software Package</b>	1		
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#### **CV Clinical Package**

**Adult Echo:** Tissue Specific Imaging software for specific transducers in Adult echo ultrasound applications

- Display optimization software with Tissue Specific presets for Adult echo imaging and Doppler applications
- Analysis software package includes a adult echo imaging protocol and report

Allows operation of S5-1, X5-1, X8-2t, X7-2t, S9-2, S8-3, L15-7io, S7-3t, S8-3t and D2cwc transducers.

#### **Pediatric Echo: Ped ECG**

- Tissue Specific imaging software for specific transducers in pediatric cardiac ultrasound applications
- Display optimization software with Tissue Specific presets for pediatric cardiac imaging and Doppler applications
- Unique Analysis software package includes a dedicated pediatric cardiac imaging protocol and report, as well as fetal echo analysis

Allows operation of S8-3, S12-4, S5-1, X5-1 D2cwc, and S7-3t transducers.

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**Fetal Echo:** Tissue Specific Imaging software for specific transducers in fetal echo ultrasound applications

- Display optimization software with Tissue Specific presets for fetal echo imaging and Doppler applications
- Analysis software package includes a fetal echo imaging protocol and report

Allows operation of C5-1, C9-2, S9-2, S8-3, X6-1 and eL18-4 transducers.

**Vascular:** Tissue Specific Imaging software for specific transducers in vascular ultrasound applications

- Display optimization software with Tissue Specific presets for vascular imaging and Doppler applications
- Analysis software package includes a vascular imaging protocol and report;

Provides vascular reporting and allows operation of eL18-4, L12-3, L12-5, L18-5, L15-7io, C5-1, C8-5, D5cwc transducers.

**TCD:** Tissue Specific Imaging software for appropriate sector array and non-imaging static Doppler transducers in Trans Cranial Doppler ultrasound applications

- Analysis software package includes a TCD protocol and report, and Tissue Specific Imaging settings

Allows operation of S5-1, X5-1 and D2tcd Transducers.

### **Cardiology 3DQ Bundle**

Provides both 3DQ and 3DQA Q-Apps

Cardiac 3D Quantification Q-App (3DQ): Provides easy access to Live 3D, 3D Zoom, Full Volume and 3D Color data sets; Offers viewing, cropping, slicing and quantification including distance measurements, area, Bi-plane LV Volume, Ejection Fraction (EF) and LV Mass calculations; 3DQ also provides Multiplanar Reconstruction (MPR) views for unlimited anatomical planes from 3D volume and 3D iSlice generation.

Cardiac 3D Advanced Quantification Q-App (3DQ Advanced): Provides display and manipulation of dynamic three-dimensional rendering and left ventricular (LV) volumes. MultiPlanar Reconstruction (MPR) views provide unlimited anatomical planes from 3D volume. Measures LV endocardial volumes, stroke volume (SV) and true 3D ejection fraction (EF) using a semi-automated border detection in 3D space. Computes global and regional LV volumes based on ACC 17-segment model. Displays global LV volume waveform and provides selective display of 17 regional volume waveforms. Offers timing assessment for each 17 minimal regional volumes and determine a synchronicity index for all volume segments or a user-selectable group of volume segments. Provides comprehensive report with summary of synchronicity indexes and displays regional Timing and Radial Excursion Parametric Images in bull's-eye representation.

### **Automated 2D Quantification Q-App (a2DQ)**

Automatically draws a region of interest based on the selected anatomical view, (user can edit the ROI if desired) and generates LV Ejection Fraction (EF), End Systolic Volume (ESV) and End Diastolic Volume (EDV). Also provides an in-depth report displaying areas, volumes and advanced

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		parameters for LV systolic and diastolic function including: LV Ejection Fraction (EF), Peak Ejection Rate (PER), Peak Rapid Filling Rate (PRFR) and Atrial Filling Fraction (AFF). TMAD allows visualization and quantification of Atrio-Ventricular Annulus planes motion in order to assess cardiac global function in an easy workflow that facilitates trending reports..			
		<b>Automated Cardiac Motion Quantification Q-App (aCMQ)</b> Automatically draws a region of interest based on the selected anatomical view, (user can edit the ROI if desired) providing an angle-independent analysis of regional myocardial-tissue velocity, displacement, strain, and strain rate, using the latest Philips speckle-tracking technology. aCMQ generates measurements of the global and regional functions and reports them in a table, a 17 or 18-segment bulls eye, and a variety of waveform displays. It additionally computes LV Ejection Fraction (EF), End Systolic Volume (ESV) and End Diastolic Volume (EDV).			
		<b>Dynamic HeartModel</b> Dynamic HeartModel, powered by AIUS, is a fully automated Live 3D quantification tool that calculates both the volumes of the LV and LA simultaneously, as well as an LV EF and SV in under 30 seconds. It quantifies Live 3D volumes using the X5-1 transducer and is designed to provide faster, easier and more robust results than previously available, on the majority of your patients.  The Dynamic HeartModel. App provides dynamics of the heart by showing moving contours for the left ventricle and left atrium which ensures higher diagnostic confidence. Dynamic HeartModelA.I. offers new measurements such as LV Mass, Cardiac Index, Complete LA volumes, and Indexed measurements using Body Surface Area for LA Max and LA Min volumes. This App allows the user to analyze multiple beats and average the results.			
		<b>Cardiac TrueVue</b> Cardiac TrueVue is a photo-realistic 3D image rendering technology that emulates light propagation in tissue. It includes a light source that is movable anywhere within the 3D data set. Cardiac TrueVue is available in Live imaging as well as in review on the following xMATRIX transducer: X8-2t, X8-2ti, X7-2t, X5-1 and X7-2. Also provides touchscreen manipulation of the 3D data set via TouchVue.			
3		<b>Battery Ext Life Pkg</b>	1		
		Highly recommended for portable ultrasound studies. Doubles the time to be in transport mode when going mobile as compared to the Battery Standard Life. Allows system to be place in sleep mode and booted up in 20 seconds. Allows activation of the smart handle when not plugged in to central power.			
4		<b>Government Security</b>	1		
		Required by all DoD customers. This option disables VNC capabilities (which if enabled would provide remote desktop support) for increased security of data.			
5		<b>X5-1 Transducer</b>	1		
		xMATRIX transducer with PureWave Crystal Technology. xMATRIX transducer with 5 to 1 MHz extended operating frequency range for adult echo applications in 2D, Live xPlane and Live 3D modes. Highly-functional, ergonomic design that operates in all imaging modes, making it practical for everyday use.			
6		<b>X8-2t Transducer</b>	2		

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		High frequency xMATRIX sector array transesophageal transducer with PureWave Crystal technology. Fully functional transducer with 8 to 2 MHz extended operating frequency range that images in 2D, Live xPlane, Live 3D, 3D Zoom, Full Volume and 3D color modes. Includes M-Mode, PW Doppler, CW Doppler, harmonics, true electrocautery suppression, and adaptive autocool. Provides a user configurable button on the handle to assist with certain workflow efficiencies during TEE exam. Includes ECG interface cable, and 1 disposable tip protector.			
7		<b>D2CWC Transducer</b>	1		
		Non-imaging 2 MHz PW/CW Doppler transducer for cardiac applications.			
8		<b>English Manual</b>	1		
		Operation Manual			
9		<b>Service Manual</b>	1		