PURCHASE ORDER: 558-B90084

REQUESTING SERVICE: ANESTHESIOLOGY
SHIP TO: VA Medical Center
V.A. Medical Center
Warehouse
508 Fulton Street
DURHAM, NC 27705-3897

Line #	Description	Qty
1	**EPIQ CVxi System**	1

The EPIQ CVxi is an interventional focused premium ultrasound system. It enables the visualization and control from EPIQ platform of EchoNavigator with anatomical intelligence fusion imaging when integrated in Philips Azurion and Allura Cath lab enabling workflow to intuitively guide your procedures.

- Can Works with single seamless connection when connected to a Philips Allura or Azurion cathlab equipped with EPIQ CVxi integration kit (AVIDIS smart cable wall socket . AVIDIS smart cable workstation, AVIDIS smart cable EPIQ , AVIDIS Hybris cable)
- Works with standard no-seamless connection when used in no Philips cathlab, standard OR, standard Echo-lab,
- To have cardiac live fusion imaging is required EchoNavigator License available on IGT catalog

Supported by our family of proprietary xMATRIX transducers and our leading edge of Anatomical

Intelligence, this platform offers our highest level of premium performance.

Reinvention of the premium ultrasound user experience

- New tablet like configurable interface revolutionizes how you interact with the system resulting in a smoother workflow with improved layout and configuration.
- Lightest premium system in its class (230 pounds) – 40% lighter than the heaviest competitive premium system.
- Monitor: 22” second generation OLED monitor for optimal display of echocardiography images. Increase in dynamic range and color gamut, as well as a 180° viewing angle, makes the OLED the best monitor for viewing in the different clinical environments required.
- Infinite articulation of control panel and monitor allows for perfect alignment whether sitting or standing (720 degrees of freedom) to scan ergonomically
- Almost silent when running (37-41dB) – equivalent to the sound of a library
- 4 transducer ports
- 4-wheel swivel and swivel/brake lock control

The most powerful architecture ever applied to ultrasound imaging

- Proprietary nSight architecture - a totally new way to form ultrasound images – all without compromise.

The combination of a new precision beamformer and massive parallel processing allow EPIQ CVxi to receive and process an enormous amount of acoustic data allowing the system to focus down to the pixel level…all in real time.

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- Up to 7,071,744 total digital channels (xMATRIX configuration)
- Up to 4,718,592 total digital channels (non xMATRIX configuration)
- Exclusive adaptive signal to noise ratio that achieves system dynamic range of up to 320 dB for improved 2D
- Windows Embedded Standard 10 Operating System
- 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
- Philips next generation XRES Adaptive Image Processing for noise and artifact reduction to improve tissue and border definition
- Fully independent, multiple mode Triplex operation Active Native data for post-processing of frozen image data and Cineloop image data
- MaxVue High Definition Ultrasound with over a 1 million more pixels and 38% larger viewing area

Transducers

Advanced Compact connector technology offers pinless design for exceptional reliability and performance that feature:

- Ergonomic designs with lightweight flexible cables
- Supports array configurations up to 20 MHz – sector, linear, curved, tightly curved, TEE and xMATRIX volume transducers

Autoscan (real time iSCAN) automatically optimizes gain while imaging and TCG continuously to assure you are achieving an optimal image in 2D & Live 3D.

- Intelligent Tissue Specific Imaging
- Application-specific and user definable Quicktext Automatic Annotation
- QuickSAVE User Defined Programs (up to 45 per transducer)
- SmartExam system-guided protocols with new features that include exam record and automatic mode switching to greatly improve workflow efficiencies
- 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 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.

Data

- 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)
- 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
- DICOM 3.0 Print and Store capability to internal drive or DVD/CD
- ntegrated Wireless DICOM
- On-board workstation-class data management with thumbnail previews and storage of images, loops, and reports
- Retrospective and prospective clip capture to internal drive or removable media

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- Ability to export QLAB native data

EchoNavigator AI workspot (requires EchoNavigator License part of IGT catalog) :

Enabled only with X8-2t TEE transducer EchoNavigator A.I. fusion imaging facilitates the process of mentally aligning X-ray and TEE imaging during complex structural heart procedures. EchoNavigator offers SmartFusion Anatomical Intelligence (AI). It is a real-time imaging product that supports the procedure by combining both X-ray and 3D TEE echo in an interactive, intuitive, and procedurally relevant way.

- Real time EchoNavigator fusion of live 2D or 3D Echo with live X-ray imaging by automatic registration and tracking
- EchoNavigator allows for multiple user-defined live views of Echo data, showing relevant anatomical structures from different angles simultaneously in real time.
- The image orientation of the ‘C-arm” view synchronizes Echo images with the X-ray images.
- The Echo viewpoint is adjusted as the gantry is repositioned (follow C-arc).
- SmartFusion projects the ultrasound field of view into the X-ray view.
- SmartFusion Anatomical Intelligence (A.I.) allows to segment out whole heart structures in the fly based on the 3D Echo data. It projects this anatomical model into the X-ray view.
- Multiple markers can be placed on soft tissue anatomical structures in the Echo image and these markers automatically appear in the X-ray image to provide context and help guidance.
- An elliptical shape, in addition to single point markers, can be selected as annotation to mark anatomical regions of interest.
- A movie of the main display area can be recorded to capture interesting events and sequences during the intervention.
- Retrospective as well as prospective recordings are supported.

Other Core Features

- Adult Clinical option, Pediatric Clinical option and vascular clinical option
- Live 3D and xPlane imaging.

Provides a combination of functionality when using xMATRIX transducers in both 2D and Live 3D modes.

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 MaxVue and real-time image alignment feature to improve efficiencies during procedures. (X5-1, X7-2, X8-2t and X7- 2t only). MultiVue: ability to align the 3D MPR planes (live and in review) to the structure related. MultiVue features enable also ViewLines that shows the projected MPR planes on the 3D tissue rendering. Enable also the 1-click alignment tool of the MPRs on the 3D tissue rendering. MultiVue is enabled on every 3D dataset (3D tissue and 3D Color).

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TrueVue

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, X7-2t, X5-1 and X7-2.

- Tissue Doppler Imaging
- 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

Generic 3D analysis tool :

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 new 3D iSlice generation.

3D Ejection Fraction solution

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 bullseye representation.

Clinical Education

***2 days of Implementation Onsite Training (expires 90 days after install, provided Mon-Fri during normal business hours), Basic System Training course for two people (expires 180 days after

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install), *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), one subscription to E-Echocardiography.com (must be activated within 90 days of
code notification), and ***6 Days of Case Study Support. All offsite training includes travel, see travel disclaimer**

***The On-Site Clinical Case Study Support provides Clinical Service Specialist support to help guide you through the integration of the Ultrasound System with the X-Ray system

- Case support is provided by Philips Ultrasound Clinical Education Specialist (CES)
- Each day is 8 hours in total – no credit will be given for partial days
- Case support must be scheduled a minimum of 3 weeks in advance
- Any reschedules must take place a minimum of 1 week in advance
- Any reschedules that occur less than 1 week will incur a $500 reschedule fee
- Any reschedule that takes place after Clinical Education Specialist (CES) is on customer site will result in forfeiture of the 1 day of Case Support entitlement
- Any cancellation less than 1 week in advance will result in the forfeiture of 1 day case support entitlement
- If maximum number of days is consumed (6), additional days may be purchased at the amount of $2,450 per day.

2		**Mitral Valve Assessment**	**1**		

TOMTEC 4D Mitral Valve Assessment Q-App (MVA)

The 4D Mitral Valve Assessment (MVA) is a TOMTEC application designed to take a Live 3D volume of the mitral valve and turn it into an easy-to-interpret dynamic model in just few simple steps, providing access to a comprehensive list of MV measurements and calculations. Results derived from MVA can be seen on the screen and on the specific report as they become available – speeding up the process of accessing the data required.

3		**Government Security**	**1**		

Required by all DoD customers. This option disables VNC capabilities (which if enabled would provide remote desktop support) for increased security of data.

4		**X5-1 Transducer**	**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.

5		**X8-2t Transducer**	**2**		

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.

6		**English Manual**	**1**		

Operation Manual