

WAREHOUSE B60081  
V.A. Medical Center  
1055 CLERMONT STREET  
DENVER, CO 80120

PLEASE NOTE: ACTUAL DELIVER TO ADDRESS IS 1700 WHEELING ST.  
AURORA, CO. 80045 ROCM NUMBER E1-255

P.O.# 554-B60081

Line #	Description	Qty
1	<b>Sparq Ultrasound System</b> The Philips Sparq Ultrasound system is a mobile ultrasound system equipped with a simple user interface that is designed for non-traditional ultrasound users. The control panel has a sealed, easy-to-clean tempered glass surface. To reduce unnecessary interaction with the system, the system controls dynamically change, showing only those keys and automation features that are compatible with the exam being performed. Sparq is simply a revolutionary solution with an intuitive design built around our customers' workflow needs.	1

#### **Control Panel and user interface:**

- Easy-to-learn graphical user interface
- Simplicity mode, a one-touch solution that presents only the controls that are used most often
- Transducer centerline and onscreen centerline provides visual guidance for out of plane needle guidance procedures
- Sealed, easy to clean, tempered glass surface
- 17 inch high resolution color monitor mounted on fully articulating arm with tilt and swivel
- Alphanumeric QWERTY keyboard
- 3 TGCs
- 5 USB flash drives on system
- Internal DVD RW drive
- iSCAN control for 2D/Doppler/color Doppler automatic optimization
- AutoSCAN control for 2D continuous and automatic optimization
- Quick Keys
- Transducer selection and tissue specific imaging control
- Sleep Mode allows the user to save battery power when not in use

#### **System Architecture:**

- Next generation all-digital compact broadband beamformer with pulse shaping capability.
- High resolution A/D conversion with 170 dB full-time system dynamic range.
- 20,000 digitally-processed channels.
- Supports PureWave technology.
- Multi-variate harmonic imaging including pulse inversion processing.
- One-touch 2D optimization with broadband frequency compounding.
- SonoCT real-time beam-steered compound imaging.
- Advanced XRES adaptive image processing.
- iSCAN one-touch intelligent optimization for 2D and Doppler (if Doppler is purchased).
- AutoSCAN-No touch continuous intelligent optimization for 2D.

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	<ul style="list-style-type: none"> <li>• Active native data manipulation.</li> <li>• Simplicity Mode-one-touch simplified control panel.</li> <li>• Advanced Imaging Control-allows the flexibility to turn on advanced controls for imaging.</li> <li>• Windows Embedded Standard 7 Operating System</li> </ul>	

#### **Imaging modes:**

- 2D
- M-mode (real-time M-mode)
- Anatomical M-mode
- Color M-mode
- Color Power Angio (CPA) imaging
- Color compare mode
- Dual mode
- 2D and flow optimization signal processing
- Intelligent Doppler — automatically maintains pre-selected 0/60 degree flow angle
- Live compare
- Tissue harmonic imaging (THI)
- High definition write zoom
- Trapezoidal imaging
- Pulse inversion harmonic imaging
- Active native data (allows manipulation of raw image data)
- Optional - Pulsed wave (PW) Doppler
- Optional - Continuous wave (CW) Doppler
- Optional - Pulsed wave tissue/color Doppler imaging
- Optional - Needle visualization — enhances viewing of the needle to assist the user in guiding the needle to the target anatomy

#### **Optional Transducers:**

The Sparq ultrasound system offers a wide complement of transducers, designed and optimized for an extensive range of exams and automatic parameter optimization of each transducer for exam type through Tissue Specific Imaging (TSI) software

- L12-4 broadband linear array
- S4-2 broadband sector array
- C6-2 broadband curved array
- C9-4v broadband curved array
- X7-2t xMATRIX array with PureWave technology

#### **Optional Maintenance and Serviceability**

- Remote Access for Expedient Clinical and Technical Support
- Flexible Service Agreements
- Clinical Application and Educational Support
- Scheduled Preventative Maintenance and System Optimization
- Utilization Reports provide data to help manage ultrasound assets

#### **Security-related features**

Line #	Description	Qty
	<b>Firewall policy blocks all unnecessary ports</b>	
	<b>Operating System hardening</b>	
	<ul style="list-style-type: none"> <li>• OS settings utilizing the DISA STIGS</li> <li>• Disable unnecessary services</li> <li>• Disable auto-run for removable media</li> </ul>	
	<b>Media export security</b>	
	<ul style="list-style-type: none"> <li>• Provides the ability to disable export of patient data to removable media</li> </ul>	
	<b>System Access Control</b>	
	<ul style="list-style-type: none"> <li>• No restrictions — users may perform exams and access all previously completed exams or MWL data</li> <li>• Only patient data is locked — users may perform exams without requiring a login, but must successfully log in prior to accessing previously completed exams or MWL data</li> <li>• Complete system is lockable — users and administrators must successfully log in prior to any system access</li> </ul>	
	<b>User management policy</b>	
	<ul style="list-style-type: none"> <li>• User management local <ul style="list-style-type: none"> <li>• Local user management</li> <li>• Support for multiple unique user accounts</li> <li>• Support for multiple unique administrator accounts</li> </ul> </li> <li>• User management remote <ul style="list-style-type: none"> <li>• Supports active directory authentication utilizing LDAP (system may not be joined to the domain)</li> <li>• Support for individual accounts or AD groups for users and administrators</li> <li>• May utilize LDAP or secure LDAP</li> <li>• Customer may configure the system to perform authenticated binding</li> </ul> </li> </ul>	
	<b>Password policies</b>	
	<ul style="list-style-type: none"> <li>• Provides the ability to specify password policies for local accounts <ul style="list-style-type: none"> <li>• Minimum password length (6-14 characters)</li> <li>• Maximum password length (6-63 characters)</li> <li>• Minimum password age (0-998 days)</li> <li>• Maximum password age (1-999 days)</li> <li>• Password complexity</li> </ul> </li> </ul>	
	<b>Account lockout policies</b>	
	<ul style="list-style-type: none"> <li>• Lockout threshold (1-999 minutes)</li> <li>• Lockout duration (1-999 minutes)</li> <li>• Lockout counter reset (minutes)</li> </ul>	

Line #	Description	Qty
	<b>Auto logoff</b>	
	<ul style="list-style-type: none"> <li>Automatically logs off a user after the specified period of inactivity, user selectable</li> </ul>	
	<b>Hard drive encryption</b>	
	<ul style="list-style-type: none"> <li>Encryption policies <ul style="list-style-type: none"> <li>128 bit</li> <li>128 bit with diffuser</li> <li>256 bit</li> <li>256 bit with diffuser</li> </ul> </li> </ul>	
	<b>Audit log export</b>	
	<ul style="list-style-type: none"> <li>Audit logs may be exported</li> <li>Available protocols are UDP or TLS</li> </ul>	
	<b>Safeguard</b>	
	This is a standard computer administration tool used to prevent unauthorized programs (malware) from running on the ultrasound system.	
	<b>Clinical Education</b>	
	Implementation Onsite Training - One day of basic system training is provided at your site after installation. Ultrasound system or upgrade onsite training provided by a PAS (Product Applications Specialist) for specific system applications or upgrades; not per modality.	
	Education is provided Monday - Friday during normal business hours.	
	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. All onsite training day expires within 90 days from system or upgrade installation date. Exceptions are for 3D Stress onsite training (which expires 9 months from system or upgrade installation date) and Fusion & Needle Navigation onsite training (which expires 180 days from system or upgrade installation date).	
	<i>All Tuitions must be registered prior to the expiration date. The course chosen must be taken within 90 days of expiration</i>	
2	<b>POC Comprehensive Pkg.</b>	1
	The POC Comprehensive Package includes the following clinical options: Abdominal, Trauma, Adult Echo, Superficial, Access, Peripheral Vascular, Pelvic, Lung, Ocular, Musculoskeletal (which provides Spine and Musculoskeletal Superficial), Nerve and Physio.	
	<b>Pulse Wave Doppler (PW)</b>	
	Available on all imaging transducers:	

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	<ul style="list-style-type: none"> <li>Adjustable sample volume size: 0.8-24.6 mm (transducer dependent)</li> <li>Simultaneous or duplex mode of operation</li> <li>Simultaneous 2D, color Doppler or CPA, pulsed Doppler</li> <li>iSCAN optimization automatically adjusts scale, baseline and Doppler gain (in select transducers and presets).</li> </ul>	
	<b>ContinuousWaveDoppler(CW)</b>	
	Available on cardiac sector array transducers:	
	<ul style="list-style-type: none"> <li>Steerable through 90° sector</li> <li>Maximum velocity range: +/-20 m/sec (transducer dependent).</li> </ul>	
	<b>Tissue Doppler Imaging</b>	
	Available on S4-2-Cardiac:	
	<ul style="list-style-type: none"> <li>Allows high frame rate acquisition of tissue motion</li> <li>Color gain and TGC</li> <li>2 color maps</li> <li>Velocity (cm/s and m/sec supported).</li> </ul>	
	Color tissue Doppler imaging	
3	<b>Needle Visualization</b>	1
	Allows a view of the needle during procedures	
	<ul style="list-style-type: none"> <li>Enhances viewing of the needle to assist the user in guiding the needle to the target anatomy</li> </ul>	
	Available on L12-4 only.	
4	<b>DICOM Networking</b>	1
	Networking capability to support DICOM Media Store and DICOM Print. Also provides Ethernet (wired and wireless) connectivity to an enterprise data management system or PACS with advanced DICOM features: DICOM Store, Modality Worklist and Performed Procedure Step. DICOM Structured reporting for Cardiac, OB, and Vascular. Supports secure DICOM transfer.	
5	<b>C6-2 Compact</b>	1
	General purpose abdominal, Pelvic which includes obstetrical and gynecological applications, nerve, FAST, Spine	
	<ul style="list-style-type: none"> <li>6 to 2 MHz extended operating frequency range</li> <li>Curved array with 128 elements</li> <li>Array has a 50 mm radius of curvature</li> <li>Optional steerable pulsed Doppler, high PRF Doppler</li> <li>SonoCT, advanced XRES, harmonic imaging. color Doppler and color power angio</li> </ul>	
6	<b>L12-4 Compact</b>	1

Line #	Description	Qty
	L12-4 broadband linear array <ul style="list-style-type: none"> <li>•Vascular, vasc access, musculoskeletal, nerve, lung, ocular, and superficial imaging applications</li> <li>• 12 to 4 MHz extended operating frequency range</li> <li>•Linear array with 128 elements</li> <li>•Array length is 38 mm</li> <li>•Optional steerable pulsed Doppler, high PRF Doppler</li> <li>•SonoCT, advanced XRES, harmonic imaging, color Doppler, and color power angio</li> <li>•4.0-6.7 MHz color Doppler</li> <li>•Biopsy kit available.</li> </ul>	
7	<b>S4-2 Compact</b> Cardiac, abdominal, FAST, Lung <ul style="list-style-type: none"> <li>•4 to 2 MHz extended operating frequency range</li> <li>•Phased array with 80 elements</li> <li>•Scanplane aperture: 20.3 mm</li> <li>•Optional steerable PW Doppler, high PRF Doppler, CW Doppler</li> <li>•Color Doppler, advanced XRES and harmonic imaging</li> <li>•Optional Tissue Doppler imaging (TDI) - Color and PW.</li> </ul>	1
8	<b>X7-2t (MTEE) Compact</b> X7-2t PureWave sector array TEE <ul style="list-style-type: none"> <li>• Transesophageal phased array with 2500 elements</li> <li>• Electronically rotatable array</li> <li>• Scanplane aperture 9.25 mm</li> <li>• Adult cardiology applications</li> <li>• 7 to 2 MHz extended operating frequency range</li> <li>• 2D, steerable PW Doppler, CW Doppler, tissue Doppler, advanced XRES, and harmonic imaging</li> <li>• Optional adapter for use on iE33 systems.</li> <li>• Optional steerable PW Doppler, CW Doppler, tissue Doppler</li> </ul>	1

### Clinical Education

X7-2T Clinical Education; \*\*\*1 day of Implementation Onsite Training (expires 90 days after install, provided Mon-Fri during normal business hours), an E-Learning subscription; Basic System Training course for two people (expires 180 days after install), a 2 Day offsite TEE University (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\*\*

\*\*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.

Line #	Description	Qty
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	<b>English Manual</b>	<b>1</b>
	Operation Manual	

<b>10</b>	<b>Peripheral Shelf</b>	<b>1</b>
	Comes standard with purchase of a color printer; or can be ordered as a stand-alone for customers who desire extra storage space on the cart.	

<b>11</b>	<b>1st SVC Manual for Gov</b>	<b>1</b>
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