

## VISN 9 Standardized Radiology Equipment Project

### Diagnostic Ultrasound Machine

General: The typical ultrasound system to be used by Radiology Department VISN wide should be capable of supporting a wide latitude of diagnostic testing consisting of both general and vascular examinations.

#### **Machine Design**

- Ergonomic Portable system (specify weight and footprint in bid)
- Multiple Transducer connections
- Multiple Speaker digital high fidelity audio
- Articulating control panel with multiple adjustments
- Articulating flicker free flat panel monitor with multiple adjustments
- Integrated storage
- Four wheel swivel/brake for locking system in place

#### **Computer Architecture**

- State of the Art CPU capable of processing multiple data inputs simultaneously
- Complete digital system for reconstruction in multiple planes-2D, 3D, 4D, MPR
- Digital multi bandwidth acoustic beam forming with digital channels and beam steering
- Auto adjusting bandwidth for optimal Doppler sensitivity and resolution
- Auto Noise and artifact reduction image processing

#### **Networking**

- DICOM 3.0 compliant
- Interface to VA Radiology Information System and Facility PACS
- Storage commit
- Modality worklist
- HL7 structured reporting
- Measurements autdownloaded to PACS preferred

#### **Transducers**

- Linear Array "Small Parts & intra-op" multi-frequency Transducers (5-17MHz range,)
- Linear Array "Vascular" multi-frequency Transducer (3-9MHz range)
- Curved & Sector Array "Abdominal-General use" multi-frequency Transducers (1-5,3-7,MHz range)
- Curved Array endocavitary multi-frequency Transducer (3-10MHz range dedicated transvaginal use) Optional
- Endovaginal transducer biopsy guide (optional)

#### **Features**

- Biopsy Guide kits (preferably disposable)
- Intuitive control panel for single button engagement of image and Doppler optimization features
- Automation of Doppler and image optimization features
- Programmable tissue presets
- Protocol driven auto-annotation with suspend feature
- Tissue Harmonics imaging
- Automated "elastography" measurement function (optional)

- Cine loop capture and dicom storage
- Cineloop last 10 seconds of imaging, M-mode, and Doppler, for review
- Power angio Doppler
- Pulsed and Continuous Wave Doppler
- 2D,M-Mode,High PRF, Color flow Doppler
- ECG capability
- Panoramic extended field of view imaging
- Color Chroma imaging
- Measurement tools including: distance, depth, circumference, volume, etc
- Doppler volume flow measurements
- Ability to send volume 3D MPR to PACS
- CD/DVD burner with JPEG or .AVI for PC compatibility (optional)
- Ability to print to laser film or paper printer in different image formats (optional)
- Ability to store exams for two weeks
- Edit demographic information and anonymize demographics on post processing
- Buildable worksheets to capture measurement and Doppler information with anatomical images
- Multiple integrated Clinical option packages that integrate standardized worksheets with annotation and examination protocols

#### **Training**

- 1 week initial onsite applications training (optional)
- 1 week onsite follow-up applications training (optional - please quote 1 week and 2 weeks of f/u training)
- All-inclusive off site training for minimum of 1 or 2 Biomed Tech (Key Operators) from each facility including any necessary prerequisites (optional- please quote for 1 and for 2)

#### **Price/Installation**

Trade in for existing equipment, including De-installation and Removal (optional)

Additional discount below VA IDIQ price if entire quantity purchased from single Vendor (optional)

Standard Warranty (mandatory)

#### **Service**

- 24/7/365 access to Vendor Help Center (mandatory)
- Remote Service Capability (preferred)
- Full access to service diagnostic software for service, maintenance, trouble-shooting (preferred)
- Monthly in person site visits to every VISN facility by a Field Engineer (optional)
- 30 minute Field Engineer response via telephone (mandatory)
- 1-2 hour on-site presence by Field Engineer (highly desirable)
- Two (2) copies of operator's instruction manuals