

**Functional Requirements for Cardiac Ultrasound  
For Iowa City VA Healthcare System (Station 636A8)  
Obligation Number 636-B44083**

*This cardiac ultrasound equipment will be used at a Medical Center for inpatient and outpatient clinics.*

**Technical Requirements:**

1. Capable of processing multiple data stream simultaneously built for 2D, 3D, MPR
2. All image modes available on a single transducer
  - a. 2D
  - b. 3D
  - c. M-mode
  - d. Harmonic image
3. Doppler Display
  - a. Frequency
  - b. Velocity
  - c. Power
4. Digital calipers
5. Selectable dynamic range
6. Adjustable transmit focus
7. Dynamic receive focus
8. Pan/Zoom
9. Split screen
10. Image storage
11. Image optimization
12. Equalization of Doppler
13. Programmable protocols
14. 3 active transducer ports
15. Tissue tracking/velocity
16. Anatomical-M PW/HPRF
17. Quantitative Applications
18. Printer hookup port
19. Interface capabilities to any vendor Cardiac PACS system (provide references)

**Transducers/Probe Types:**

1. Cardiac Phased Array
2. Cardiac non-imaging probe
3. TEE transesophageal probe
  - a. 2D and 3D Dynamic elevational focusing
  - b. 7 to 2 MHz extended operating frequency range
  - c. 3D zoom
  - d. Electrocautery suppression
  - e. Electronic rotatable array from 0-180 degrees

*Each vendor is to respond with transducers that meet the criteria listed above. Please also include all other transducers offered by your company in the optional section on the quotes.*

**Analysis Packages:**

1. Cardiac
2. Contrast
3. Card Coronary
4. Pediatrics

**Support and other Documentation to Provide:**

1. Provide DICOM Conformance Statement
2. Provide completed pre-procurement Assessment and MDS2 Document
3. Provide information about your company's support structure during the warranty period (i.e. a listing of Field Service Engineer locations and availability, support 800 phone numbers, remote support, etc.)
4. Please provide version/platform long-range plan
5. References for sites that have successfully interfaced with different vendor Cardiac PACS systems

**Training**

1. On-site
  - a. Clinical applications **during GO LIVE** - minimum of 4 days (8 hrs each day) – for each site.
  - b. Training should include both Technologists and Physicians
2. Follow up
  - a. Applications training to be provided after technologists have hands-on experience with the system - between **3-4 months** following GO LIVE - minimum of 2 days (8 hrs each day)– for each site.
  - b. Applications training to be provided after technologists have hands-on experience with the system – between **6-9 months** after GO LIVE - - minimum of 2 days (8 hrs each day)– for each site.
3. One Biomedical Technical training – tuition and travel

**Trade-in:**

Option 1 **ALL Hard Drives will be retained by the VA.**

Ultrasound:

EE: 2998295  
Manufacturer: Philips  
Model: IE33  
S/N: 03B598  
Acq. Year: June 2010

TEE Probe:

EE: 3010299  
Manufacturer: Philips  
Model: X7-2T  
S/N: B09894  
Acq. Year: January 2012