

**Functional Requirements for Radiology Ultrasound
For Fargo VA Healthcare System (Station 437)
Obligation Number 618-B59022**

This radiology ultrasound will be used for the following clinical applications: General purpose, abdominal, small parts, guidance for interventional procedures, and vascular.

Technical Requirements:

1. Capable of processing multiple data streams simultaneously built for 2D, 3D and MPR
2. All imaging modes available on a single transducer
 - a. 2D
 - b. 3D (freehand)
 - c. Navigation Software
 - d. Image Fusion Software
 - e. Harmonic Imaging
3. Doppler Displays
 - a. Frequency
 - b. Velocity
 - c. Power - Microvascular/directional
 - d. Duplex
 - e. Triplex
4. Panoramic mode – less stitching is preferred
5. Query/Retrieve from any previous vendors equipment/image
6. Minimum monitor – minimum 20 inches
7. Touchscreen
8. Split screen – minimum of 2
9. Image storage – minimum 3 days
10. One button image optimization
11. One button optimization of Doppler
12. Programmable protocols
13. 3 active transducer ports
14. Operating system – Windows 7
15. Elastography
16. Beam Steering
17. Ease of maneuverability
 - a. Screen rotation
 - b. Unit moves up and down both monitor and the control panel
 - c. Size of equipment
 - d. Weight of unit
 - e. Rotation of desktop/control panel
18. Ability to enter a standby mode or sleep mode
19. Battery life – minimum 4 hours

Transducers/ Probe Types

1. Linear array high frequency range
2. Linear array lower frequency range
3. Convex/curved for abdominal & interventional

4. Phased Array
5. Multi-frequency
6. Endo Cavity
7. Transducers - Navigation/Fusion Biopsy Guide
8. Intraoperative (i.e. hockey stick)
9. Transducers - Mechanical 3D
10. Single crystal technology

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

Analysis Packages:

1. Procedural
2. Abdominal
3. Pelvic
4. Small Parts
5. Urology
6. Vascular – measurement and analysis of vessels
7. OB
8. Breast

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

Support and other Documentation to Provide:

1. Please provide the weight of the unit.
2. Please provide the physical size (Height, Width, Depth).
3. Please describe in detail the standby mode or sleep mode.
4. Provide DICOM conformance statement.
5. Provide completed pre-procurement assessment form (6550).
6. Provide information about your companies support structure during the warranty period (i.e. a listing of field service engineer locations and availability, support phone number(s), remote support, etc.).
Warranty period shall be a minimum of 1 year – part and labor. Contractor shall provide a hard copy of the warranty with the product.
7. Please provide version/platform long-range plan.
8. Provide 2 copies product service manuals (1 hard copy and 1 digital copy).
9. Provide references for the clinical applications trainer that will be assigned to VISN 23.

Training

1. On-site
 - a. Clinical applications **during go-live** - minimum of 4 days (8 hours each day)
 - b. Training should be for both technologists and physicians
 - c. 1 day of the training should be dedicated to training on fusion and navigation
2. Same clinical applications trainer for each site, who must be cleared through VISN 23 workgroup
3. Follow-up

- a. Applications training to be provided after technologists have hands-on experience with the system - between **3-4 months** following go-live for a minimum of 2 days (8 hours 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 for a minimum of 2 days (8 hours each day) for each site.
4. Off-site
 - a. Technologists – off-site training – for 1 technologist(s)
 - b. Tuition and travel (including, but not limited to travel to and from airport, airfare or fuel, lodging, per diem, rental vehicle and incidentals) is preferred
 - c. This training should be scheduled and completed after the system has been installed
5. Biomedical Technical Training for 1 technician – to include tuition and travel (lodging, rental car, airfare/mileage and per diem). Include training for all courses including any prerequisites.

Trade-in:

EE Number: 17130

Manufacturer: PHILIPS

Model: IU22

SN: 02XLQ0

Acquisition Date: 5/2/2008