

# Equipment Specifications

## C-arm

VISN1/VA Boston Healthcare System-West Roxbury Campus  
523-B91006

### A. REQUIREMENT OVERVIEW

This document highlights the requirements, technical specifications, and services being requested by VA Boston Healthcare System towards the purchase of a portable Radiographic/Fluoroscopic (R/F) unit that provides radiographic and fluoroscopic imaging in surgical, orthopedic, critical care and emergency care procedures. Contractor shall provide all labor, equipment, materials, parts, tools, software, project management and disposal necessary to deliver and install a fully functional portable R/F unit at 1400 VFW Parkway, West Roxbury, MA 02130

Facility	Quantity
VA Boston Healthcare System- West Roxbury Campus	1

### B. TECHNICAL REQUIREMENTS

#### 1. Unit physical specifications

a. Minimum detector size [cm]	12 inches
-------------------------------	-----------

#### 2. Additional specifications

<input checked="" type="checkbox"/>	a. Flat detector technology
<input checked="" type="checkbox"/>	b. Foot pedal
<input checked="" type="checkbox"/>	c. Flat panel monitor(s) workstation on a cart with either dual or single high-resolution monitors
<input checked="" type="checkbox"/>	d. Reference monitor
<input checked="" type="checkbox"/>	e. Integrated keyboard on workstation allowing back-up functionality to touch screen control system
<input checked="" type="checkbox"/>	f. Measurement software
<input checked="" type="checkbox"/>	g. Automatic video playback
<input checked="" type="checkbox"/>	h. Integrated dose reporting, specifically RDSR
<input checked="" type="checkbox"/>	i. User-configurable threshold dose warning
<input checked="" type="checkbox"/>	j. Digital image rotation, reversal, and image invert
<input checked="" type="checkbox"/>	k. Selectable mode settings for high-level pulse and low dose
<input checked="" type="checkbox"/>	l. Easy positioning of the c-arm – ability to “rainbow” (over-scan) 180° without moving away from the patient
<input checked="" type="checkbox"/>	m. DVD/CD or USB drive
<input checked="" type="checkbox"/>	n. Audible/visual x-ray on warning



### 3. Generator specifications

<input checked="" type="checkbox"/>	a. Ability to power from a standard wall outlet
<input checked="" type="checkbox"/>	b. Pulse and continuous fluoroscopy modes

### 4. Advanced applications

<input checked="" type="checkbox"/>	a. Digital Subtraction Angiography (DSA)
<input checked="" type="checkbox"/>	b. Pulsed cine Bolus chase imaging with single contrast injection
<input checked="" type="checkbox"/>	c. Roadmap technology for vascular imaging, to include Increased frame rate from base model 30fps or greater Real-time digital subtraction Roadmapping Increased image storage (1000 images or greater) Bolus tracking Vessel measurement tools and calculations Catheter/guidewire visualization enhancement Preset vascular profiles

### 5. Security/Connectivity requirements

<input checked="" type="checkbox"/>	a. OEM-supported operating system
<input checked="" type="checkbox"/>	b. Latest DICOM print, store, commit, radiation dose structured report (RDSR), and modality worklist
<input checked="" type="checkbox"/>	c. Wireless connectivity to VA network – Compatible with 802.11b/g/n and FIPS 140-2 compliant
<input checked="" type="checkbox"/>	d. Encrypted hard drive
<input checked="" type="checkbox"/>	e. PACS compatibility – [Vendor Neutral]

### 6. Added Value

Specifications listed below are not required, but preferred. Vendors who do not include the below specifications in the submitted offer will not be docked or excluded from consideration. Specifications listed below will be evaluated based on added value.

<input checked="" type="checkbox"/>	a. Additional year(s) of warranty
<input checked="" type="checkbox"/>	b. Version/platform long-range plan

## C. TRAINING REQUIREMENTS

### 1. Clinical Training

<input checked="" type="checkbox"/>	a. On-site clinical applications training for [10] technologists during go-live
-------------------------------------	---



## 2. Biomedical Technician Training

**Please reference the “Instructions to Offers” section 2.8.g for further information about the type of information to provide by equipment type not by specific request. Please also reference the “Instructions to Offers” section 7.3.3. for response format.**

Technical training information to include detailed information about the curriculum and length of the biomedical technical training required for each equipment type.

Although the NAC will not award this training along with the equipment, it is imperative that the customer is informed that this training is available. Vendors must demonstrate that they can provide any required off-site training, therefore off-site training should be quoted as an optional item. Off-site training will be purchased at the time of need via a modification (if the original order remains open) or via a separate order. No travel expenses for any VA employees will be included in any HTME equipment or training order.

## D. SERVICE REQUIREMENTS

1. VPN/Remote Access – The vendor shall provide any and all equipment service programs, such as remote diagnostics, during the warranty period. The vendor shall provide post-warranty remote diagnostic service program as an “Add Option” with the offer. The system shall provide vendor remote diagnostics via VPN. The vendor shall either utilize the VA national site-to-site VPN or work with the Office of Cyber and Information Security and the VAMC Information Systems Security Officer to establish a client-based VPN.
2. Service and Operator Manuals – The vendor shall provide the following documentation for the proposed systems:
  - a. Two (2) copies of operator instruction manuals (one (1) electronic and one (1) physical copy)
  - b. Two (2) copies of a service manuals (one (1) electronic and one (1) physical copy)

\*Vendors can include the physical copy as a priced line item in their quote as applicable.
3. Minimum Warranty – The system and accessories shall be covered under the manufacturer’s warranty and shall include all parts and labor for one year following acceptance by the VAMC. This warranty must include PMs as required by the manufacturer. The manufacturer’s factory-trained field service representatives shall perform installation and maintenance during the warranty period.

Vendors are encouraged to include any offerings for service, warranty, and training that may exceed the minimum requirements, to include information on their service support structure during and after the warranty period. Vendors who do not include any added value offerings for service, warranty, and training will not be docked or excluded from consideration. However, any such offerings will be evaluated based on added value.

## E. INFORMATION AND OTHER DOCUMENTATION REQUIRED

**Please reference the “Instructions to Offers” section 2.8a-h for further information about the type of information to provide by equipment type not by specific request. Please also reference the “Instructions to Offers” section 7.3.3. for response format.**

1. Completed pre-procurement assessment form (6550 Appendix A)
2. Completed Manufacture Disclosure Statement for Medical Device Security (MDS2) form
3. Federal Information Processing Standard (FIPS) 140-2 certification



4. Product brochures
5. Technical specification sheets, to include dimensions and weight of the system
6. Typical drawings (pdf version of the CAD drawings)
7. Technical training- Biomedical: information to include detailed information about the curriculum and length of the biomedical technical training required for each equipment type.
  - Although the NAC will not award this training along with the equipment, it is imperative that the customer is informed that this training is available. Vendors must demonstrate that they can provide any required off-site training, therefore off-site training should be quoted as an optional item. Off-site training will be purchased at the time of need via a modification (if the original order remains open) or via a separate order. No travel expenses for any VA employees will be included in any HTME equipment or training order.
8. Support information to include your company's support structure during and after the warranty period
  - On-line or telephonic applications support and availability (include third party coverage)
  - A listing of field service engineer locations and availability
  - A listing of part depots

## F. TRADE-IN

- |  |                                       |
|--|---------------------------------------|
| <input checked="checked" type="checkbox"/> | a. VA has no trade-in units to offer. |
|--|---------------------------------------|

