

# Equipment Specifications

## Digital Radiography

VISN 23/Minneapolis VA Healthcare System – Shakopee CBOC  
618-B99005

### A. REQUIREMENT OVERVIEW

This document highlights the technical specifications and services being requested by the Minneapolis VA Healthcare System for its Shakopee Community Based Outpatient Center (CBOC) for consideration toward purchase of Digital Radiography System. This equipment will be used for general diagnostic imaging. Offerors under this proposal shall provide all equipment and accessories, installation services, training, and project management support.

Facility	Quantity
Shakopee CBOC	1

### B. TECHNICAL REQUIREMENTS

#### 1. Unit physical specifications

a. Minimum generator output power [kW]	80
b. Minimum generator voltage range [kV]	50
c. Minimum tube height from floor when used with wall stand [in]	13
d. Minimum image plate height from floor [in]	8
e. Minimum tilt of imaging surface [deg]	90
f. Minimum table patient weight limit [lbs]	600
g. Maximum table patient weight limit [lbs]	1000
h. Minimum table height from floor [in]	23
i. Minimum table width [in]	31
j. Minimum detector field of view [in x in]	14" x 17"
k. Minimum spatial resolution [lp/mm]	2.0

#### 2. Additional specifications

<input checked="" type="checkbox"/>	a. High-frequency generator with automatic dose rate control
<input checked="" type="checkbox"/>	b. Ability to accept multiple power feeds from 110v to 440v
<input checked="" type="checkbox"/>	c. Minimal foot print – Per VA design guide to fit inside a 300 square foot room
<input checked="" type="checkbox"/>	d. Minimum or zero troughing required
<input checked="" type="checkbox"/>	e. In-room protocol adjustment via tube head or other in-room mounted system
<input checked="" type="checkbox"/>	f. Automated movement for long-axis stitching (option)
<input checked="" type="checkbox"/>	g. Bariatric table (option)



<input checked="" type="checkbox"/>	h. Free-floating manual tabletop
<input checked="" type="checkbox"/>	i. High efficiency detector
<input checked="" type="checkbox"/>	j. Second plate – Minimum detector field of view of 17" x 17" [in x in]
<input checked="" type="checkbox"/>	k. Grids and grid caps in various foci and ratios
<input checked="" type="checkbox"/>	l. Most updated advanced imaging software
<input checked="" type="checkbox"/>	m. Patient alignment system
<input checked="" type="checkbox"/>	n. Pre-programmed exposure settings located on tube or in control room

### 3. Software Requirements

<input checked="" type="checkbox"/>	a. Stitching – ability to stitch multiple long-axis images with options for automated and manual process
<input checked="" type="checkbox"/>	b. Bone suppression – ability to suppress overlaying bone such as ribs on chest images (option)
<input checked="" type="checkbox"/>	c. Ability to apply multiple image processing algorithms both pre- and post-acquisition to allow for soft tissue and/or bone enhancement
<input checked="" type="checkbox"/>	d. Dose monitoring – the system must be able to supply a technology that allows for monitoring and tracking of radiation dose provided to a patient
<input checked="" type="checkbox"/>	e. Dose reduction – the system must have systems in place to facilitate regular protocol optimization and reduced radiation dose to the patient
<input checked="" type="checkbox"/>	f. Repeat rate – ability to track repeat/retake data to include such items as technologist (required unique identifier), reason for repeat, patient dose, exam type, etc. The data should be exportable to Excel or other databases for tracking, trending, and combining with data from other imaging sources within the facility.
<input checked="" type="checkbox"/>	g. Security – ability to protect sensitive patient data using unique user authentication

### 4. Workstation Requirements

a. Minimum number of acquisition workstations	1
b. Minimum acquisition workstation monitor size [in]	19
c. Style of acquisition workstation monitor	LCD
d. Functionality of acquisition workstation monitor	Touchscreen
e. Minimum acquisition workstation hard drive size [GB]	300
f. Minimum number of uninterruptible power supply (UPS) to bring workstation down safely	1
g. Minimum number of bar code readers for use in selection of patients' wristband or barcodes from the worklist	1



h. Minimum number of integrated DICOM structured reporting features	1
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## 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. Encrypted hard drive
<input checked="" type="checkbox"/>	d. PACS compatibility – Visage

## 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. Post-warranty remote diagnostic service program
<input checked="" type="checkbox"/>	c. Version/platform long-range plan
<input checked="" type="checkbox"/>	d. OEM-supported operating system through 2022
<input checked="" type="checkbox"/>	e. Compatibility with Cerner EMR
<input checked="" type="checkbox"/>	f. Tomo – <i>this is not a requirement, but if the system is capable of this, please include this as an option</i>

# C. TRAINING REQUIREMENTS

## 1. Clinical Training

<input checked="" type="checkbox"/>	a. On-site clinical applications training for 2 technologists during go-live
<input checked="" type="checkbox"/>	b. On-site follow-up clinical applications training for 2 technologists once technologists have hands-on experience with the system
<input checked="" type="checkbox"/>	c. Technologists who complete the clinical applications training shall receive continuing education credits (CMEs).
<input checked="" type="checkbox"/>	d. Vendors shall be responsible for accommodating different personnel shifts for clinical applications training 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. OTHER INFORMATION/DOCUMENTATION REQUESTED**

**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

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