

Equipment Specifications

Computed Tomography Scanner

VISN 15/KCVA Medical Center

589-B80016

A. REQUIREMENT OVERVIEW

The KCVA Radiology Department is seeking to procure a Computed Tomography X-ray system. It is intended to produce cross-sectional images of the body by computer reconstruction of X-ray transmission data taken at different angles and planes, including Axial, Cine, Helical (Volumetric), Cardiac, Spectral, and Gated acquisitions for all patient ages. The system is indicated for head, whole body, cardiac and vascular x-ray Computed Tomography applications. The device output is a valuable medical tool for the diagnosis of disease, trauma, or abnormality and for planning, guiding, and monitoring therapy.

B. TECHNICAL REQUIREMENTS

1. Unit physical specifications

a. Minimum number of slices	320
b. Minimum gantry aperture [cm]	70
c. Minimum detector width [mm]	0.05
d. Minimum detector field of view [cm]	50
e. Table height range from floor [cm]	43-99
f. Maximum patient weight supported [kg]	314
g. Minimum 360° rotation time [s] – Vendors are encouraged to propose the fastest 360° rotation available.	0.35
h. Maximum system dimensions [cm]	1900 x 1900
i. Maximum system weight [kg]	2000

2. Additional specifications

<input checked="" type="checkbox"/>	a. The CT scanner shall provide the ability for the user to independently operate the table, gantry, and CT fluoroscopy mode from the control room.
<input checked="" type="checkbox"/>	b. The CT scanner shall provide the ability for the user to independently operate the table, gantry, and CT fluoroscopy mode while performing biopsy or patient-related exams.
<input checked="" type="checkbox"/>	c. Ability to display CTDIvol (dose) before scan
<input checked="" type="checkbox"/>	d. Ability to display DLP (dose) after exposure
<input checked="" type="checkbox"/>	e. Modeled iterative reconstruction/Noise reduction. Vendors are encouraged to propose the greatest available noise reduction.



<input checked="" type="checkbox"/>	f. Longest z-axis acquisition per rotation and, while achieving that – maximum temporal resolution, maximum spatial resolution in mm and in line pair equivalents, maximum construction rate (frames/sec) with maximum available noise reduction applied, and smallest focal spot size for largest z-axis coverage
<input checked="" type="checkbox"/>	g. Triggered studies using an ROI gate place in the appropriate vessel for CTA and CCTA
<input checked="" type="checkbox"/>	h. Gantry- or ceiling-mounted contrast injector with proven reliable synchronicity.
<input checked="" type="checkbox"/>	i. Full UPS
<input checked="" type="checkbox"/>	j. Power conditioning (as defined by vendor)
<input checked="" type="checkbox"/>	k. Ability to lock protocols
<input checked="" type="checkbox"/>	l. Ability to facilitate regular protocol optimization and reduced radiation dose to the patient, including but not limited to iterative reconstruction technology

3. Workstation Requirements

<input checked="" type="checkbox"/>	a. Primary operating/scanning workstation with a UPS
<input checked="" type="checkbox"/>	b. Secondary reconstruction workstation with a UPS

4. Advanced Applications

<input checked="" type="checkbox"/>	a. CT Perfusion
<input checked="" type="checkbox"/>	b. Lung CAD
<input checked="" type="checkbox"/>	c. Dose Tracking
<input checked="" type="checkbox"/>	d. Integration to Advanced Visualization System – VITREA

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

5. Security/Connectivity requirements

<input checked="" type="checkbox"/>	a. OEM-supported operating system
<input checked="" type="checkbox"/>	b. DICOM 3.0 print, store, commit, radiation dose structure report and modality worklist
<input checked="" type="checkbox"/>	c. HL7 integration (HIS/RIS)
<input checked="" type="checkbox"/>	d. Encrypted hard drive
<input checked="" type="checkbox"/>	e. PACS compatibility – Philips

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. Gantry tilt
<input checked="" type="checkbox"/>	b. Ceiling-mounted contrast injector

C. TRAINING REQUIREMENTS

Description	No. of Personnel
1. On-site clinical applications training during go-live for technologists, to cover each of the software packages	4
2. On-site follow-up clinical applications training, to be provided after technologists/physicians have hands-on experience with the system	4
3. Off-site clinical applications training for technologists (to include tuition)	4
4. On-site clinical applications training for physicians during go-live	4
5. Biomedical technician training package (to include tuition)	3

Biomedical technician training shall include any prerequisites required prior to the training and shall be equivalent to the training received by OEM field service representatives. Technicians shall be given all service manuals, schematics, diagrams, diagnostic software, other special tools, and keys equivalent to what OEM field service representatives have available to diagnose, troubleshoot, repair, and maintain the equipment.

Technologists who complete the clinical applications training shall receive continuing education credits (CMEs).

Off-site training will not be purchased at the time of award. Vendors must demonstrate that they can provide any required off-site training listed above, therefore off-site training should be quoted as an optional item. Travel for VA employees is not authorized under the HTME contracts. In no case should any training include expenses for travel or travel for VA personnel at no cost.

D. SERVICE REQUIREMENTS

- VPN/Remote Access – The vendor shall provide, at no additional cost, 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.
- Service and Operator Manuals – The vendor shall provide the following documentation for the proposed systems:
 - Two (2) copies of operator instruction manuals (one (1) electronic and one (1) physical copy)
 - Two (2) copies of a system manager (super user) manual outlining back-up procedures, managing privilege group limits, routine tasks, etc.
- 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 requirements with their proposals. 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

1. Product brochures
2. Technical specification sheets, to include dimensions and weight of the system
3. Longest z-axis acquisition per rotation, and while achieving that, the
 - a. Maximum temporal resolution,
 - b. Maximum spatial resolution in mm and in line pair equivalents,
 - c. Maximum reconstruction rate (frames/sec) with maximum available noise reduction applied, and
 - d. Smallest focal spot size
4. Information on the functionality each workstation provides (e.g. same functionality, if they operate independently)
5. Method used for cooling (i.e. water-cooled vs air cooled)
 - a. If water-cooled, specify the method of connection (e.g. simple access to cold water vs intercooler)
 - b. If air-cooled, specify the sound levels and BTU production into the room.
6. DICOM Conformance Statement
7. IHE integration statement
8. FIPS 140-2 certification
9. Completed pre-procurement assessment form (6550)
10. Completed MDS2 form
11. Detailed information about the curriculum and length of the biomedical technical training
12. Details on any off-site training offered for technologists
13. Information about your company's support structure during the warranty period.
 - a. Describe on-line or telephonic applications support and availability.
 - b. Provide a listing of field service engineer locations and availability
 - c. Provide a listing of part depots
14. Information about your company's support options following the warranty period, including a description of on-line or telephonic applications support and availability
15. Version/platform long-term plan
16. Two (2) copies of the product service manual (one (1) hard copy and one (1) digital copy)
17. Information on any FDA safety recalls associated with the proposed equipment

F. TRADE-IN

<input checked="" type="checkbox"/>	a. In instances where sanitization of ePHI compromises the OS and/or application software, or requires the removal of internal storage media, the vendor accepts the equipment "as is" and can elect at their own discretion to contract with the original equipment manufacturer (OEM) to restore the system.
<input type="checkbox"/>	b. In instances where sanitization of ePHI compromises the OS and/or application software, the operating system and application software will be reloaded by VA or a vendor contracted by VA on the native system post drive sanitization. Verification of system operation is the responsibility of the vendor.
<input type="checkbox"/>	c. VA has no trade-in units to offer.



The following equipment is available for trade-in. Please reflect any credits provided for trade-in equipment in the proposal.

Station	589
Manufacturer	GE
Model	VCT
EE/Asset Number	98223
Serial Number	6525-439454

