Digital Radiographic Mobile X-ray System

Mobile radiographic unit must be battery operated and motorized. Unit must be capable of imaging all current portable exams on a DR panel. Unit must also be capable of operation as a conventional mobile unit in case the DR panel becomes inoperable. Unit must have capability of sending images through existing network port and have wireless transfer of images through Hospital wireless network.

Bidding vendors are required to meet or exceed all published specifications. If your product specifications deviate from published specifications, you MUST explain the deviation to be considered. If no explanation of deviation is submitted, it will be assumed that ALL specifications are met. Inaccurate proposals will be rejected.

**Digital radiographic mobile x-ray system with the following specifications:**

- Maximum tube voltage: 125 kV
- Maximum tube current: 160 mA
- Maximum power: 12.5 kW (12.5 kW at 0.1 sec.)
- Power supply: 12 V 7.2 Ah x 20 batteries
- Tube voltage: 40 to 125 kV in increments of 1 kV.
- Setting of mAs: From 0.32 to 320 mAs in 12.5% steps
- Anatomical programs: 72 APR selections
- Power for charging: Single-phase AC: 50/60 Hz, 1 kVA
- Voltage for charging: 100, 110, 120, 200, 220, 230, 240V
- X-ray tube support: Telescopic arm
- Focus height: 600 - 2010mm (23.6” – 79.1”)
- Arm length: 635 – 1200mm (25” – 47.25”)
- Column rotation range: +/- 270 deg.
- Tube rotation around tube support axis: +/- 180 deg.
- Tube rotation around tube axis: Forward min. 90 deg. back min. 20 deg.
- Travel speed: 5 +/- 0.5 km/h
- Column height: 1930mm (76”)
- Total unit width: 580mm (22.83”)
- Total unit length: 1250mm (49.21”)
- Total weight: 394 kg. (868 lbs)
- Capability of repositioning the mobile unit (forward or backward) utilizing controls mounted on front of collimator (beside positioning tool)
- Exposure status lights on main control and collimator (Standby, Ready up, Exposure)
- “All Free” buttons: Pressing buttons release all electromagnetic locks for arm rotation, arm extension, and vertical movement of the X-ray tube; must be located at least 4 positions around the tube column / collimator.

**X-ray tube with the following specifications:**

- Maximum anode heat capacity: 300kHU
- X-ray tube focal spot: 0.7mm
• Target angle: 16 deg.

**DR flat panel detector with the following specifications:**

- 14” x 17” flat panel detector with cord, capable of acquiring ALL current portable images.
- Method: scintillator & amorphous silicon (a-Si)
- Sensor: LANMIT 4
- Scintillator: GOS
- Pixel pitch: 160 x 160 microns
- Pixels: 2,208 x 2,688 pixels (5.9 million pixels)
- Image size: Automatic sizing up to 14” x 17”
- Grid: Attachable (Canon CXDI grid)
- A/D: 14-bit
- Grayscale: 4,096 grayscale (12-bit)
- Preview image access time: Approx. 3 – 5 seconds after x-ray exposure
- Total image processing: Approx. 20 seconds per image
- MLT(M) Processing Software
- Interface: DICOM 3.0 Ethernet 10/100 Base T
- DICOM: DICOM 3 compatible, Print Management Service Class (SCU), Storage Service Class (SCU), and others
- Storage of 2000 images on unit.
- Dimensions of panel: Sensor unit (W x L x T): 19.3 x 18.8 x 0.9 in.
- Weight: Sensor unit: 10.6 lbs.
- DICOM Worklist interface