

143-RECEIVING

V.A. Medical Center

VA MEDICAL CENTER

1970 ROANOKE BLVD

SALEM, VA 24153

658-B50010

| Qty | Description  |
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| 1   | <p><b>Contract #SPM2D1-11-D8344</b><br/><b>VA Contract #V797P-6054(b)</b></p> <p><b>ZIEHM VISION R FD Digital Mobile C-arm with 20 x 20 Flat Panel with Vascular Package and 20kW Generator</b></p> <p>Unsurpassed digital image quality with optimum dose efficiency. Designed to perform a wide range of surgical imaging applications with leading edge technology and state-of-the-art functionality. System includes 1.5k x 1.5k high resolution, 20cm x 20cm flat panel detector digital imaging, rotating anode x-ray tube and Unique Liquid Cooling of x-ray tube/ 20 kW generator for unlimited fluoroscopy time. Proprietary Object Detected Dose Control (ODDC) software optimizes image quality and minimizes dose levels through automatic motion detection, automatic metal object correction, automatic dose reduction and automatic object detection for image optimization even when subject anatomy is at the periphery of the field of view. Simple user interface provided by intuitive Vision Center TFT control panel that includes anatomic program selection and technologist reference image display.</p> <p><b>X-Ray Generator <sup>3</sup></b></p> <ul style="list-style-type: none"><li>• 20kHz High Frequency, Monoblock</li><li>• 20 kW Power including high power boost caps, microprocessor controlled</li></ul> <p><b>X-ray Tube</b></p> <ul style="list-style-type: none"><li>• Rotating anode x-ray tube with 0.3/0.6 mm focal spots</li><li>• Max. anode heat content; 300 kHU / 222 kJ</li><li>• Max. anode heat dissipation: 870W</li><li>• Tube housing heat capacity:<ul style="list-style-type: none"><li>○ Advanced Active Cooling and heat management system</li><li>○ 5 million HU system heat capacity</li><li>○ 100,800 HU/Min. continuous dissipation in clinical performance</li></ul></li></ul> <p><b>Collimator System</b></p> <ul style="list-style-type: none"><li>• Dedicated pre-collimator for flat panel detector</li><li>• Collimator Rotation: +/- 90°</li><li>• Iris Collimator: 50 – 198 mm diameter</li><li>• Slot Collimator: 50 – 198 mm diameter</li><li>• Virtual Collimation without radiation</li></ul> |

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|     | <p><b>Operating Values</b></p> <ul style="list-style-type: none"> <li>• Pulsed Fluoroscopy <ul style="list-style-type: none"> <li>○ kV range: 40 – 120 kV</li> <li>○ mA range: 1.5 – 200 mA</li> <li>○ pulse width: 4 – 50 ms</li> <li>○ pulse rate: 1, 2, 4, 8, 12.5, 25 pulses/sec</li> </ul> </li> <li>• Digital Snapshot Mode <ul style="list-style-type: none"> <li>○ kV range: 40 – 120 kV</li> <li>○ mA range: up to 200 mA</li> </ul> </li> <li>• Digital Cine Pulse <ul style="list-style-type: none"> <li>○ kV range: 40 – 120 kV</li> <li>○ mA range: 1.5 – 200 mA</li> <li>○ pulse width: 4 – 50 ms</li> <li>○ pulse rate: up to 12.5 pulses/sec, 12.5 frames / second</li> </ul> </li> </ul> <p><b>Flat Panel Detector System</b></p> <ul style="list-style-type: none"> <li>• 19.8 x19.8 cm, amorphous silicon photodiode TFT technology</li> <li>• Detector matrix: 1,024 x 1,024 pixels <ul style="list-style-type: none"> <li>○ Magnifier 1 : 768 x 768 pixels</li> <li>○ Magnifier 2: 512 x 512 pixels</li> </ul> </li> <li>• System resolution 2.4 lp/mm</li> <li>• Dynamic Range: 72dB</li> <li>• Anti-scatter grid</li> <li>• Laser aimer integrated in detector housing</li> </ul> <p><b>Monitors</b></p> <ul style="list-style-type: none"> <li>• Two, ultra-high resolution and brightness, 19" flat screen</li> <li>• Resolution: 1,280 x 1,024 pixels</li> <li>• Viewing angle: 178°, Tilting +/- 10°</li> <li>• Brightness: 1,000 cd/m²</li> </ul> <p><b>Digital Image Processing</b></p> <ul style="list-style-type: none"> <li>• Real-Time Processing Functions <ul style="list-style-type: none"> <li>○ Recursive Filter: 4 levels</li> <li>○ Stack filter: 5 levels</li> <li>○ Edge enhancement: 5 levels</li> <li>○ Window and level</li> <li>○ Digital image rotation without radiation</li> <li>○ Grayscale inversion</li> <li>○ Digital shutters</li> </ul> </li> <li>• Post processing Functions <ul style="list-style-type: none"> <li>○ Edge enhancement</li> <li>○ Zoom</li> <li>○ Image rotation</li> <li>○ Windowing</li> <li>○ Grayscale inversion</li> <li>○ Image cropping</li> </ul> </li> </ul> <p><b>Application-Oriented Anatomical Programs</b></p> <ul style="list-style-type: none"> <li>• Bone, heart, abdomen</li> <li>• Metal, soft, large patient</li> </ul> <p><b>Object Detected Dose Control</b></p> <ul style="list-style-type: none"> <li>• Automatic object detection</li> <li>• Automatic motion detection</li> <li>• Automatic dose reduction</li> <li>• Automatic metal correction</li> </ul> |

| <b>Qty</b> | <b>Description</b>  |
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|            | <p><b>Image Acquisition</b></p> <ul style="list-style-type: none"> <li>• Auto save</li> <li>• Cine loop, up to 12.5 frames/second</li> </ul> <p><b>Digital Image Storage &amp; Archiving</b></p> <ul style="list-style-type: none"> <li>• 65,000 image memory</li> <li>• USB 2.0 port, USB stick</li> </ul> <p><b>Smart Vascular Package</b></p> <ul style="list-style-type: none"> <li>• Innovative SmartVascular user interface</li> <li>• DSA, Maximum Opacification (MSA), and Roadmap (RSA) functions</li> <li>• Pixelshift and Landmarking</li> <li>• Extremity, torso, and bolus chase programs for optimized image quality</li> </ul> <p><b>User Interface</b></p> <ul style="list-style-type: none"> <li>• TFT touch screens on C-arm and workstation with Smart-Eye technologist reference image <ul style="list-style-type: none"> <li>○ Intuitive icons for easy use</li> <li>○ Patient annotation</li> <li>○ SmartArchive for easy, fast image archive access and selection</li> <li>○ 1, 4, or 16 image mosaic</li> <li>○ Live image display on C-arm touch screen</li> </ul> </li> <li>• HIPAA security package</li> <li>• X-ray enable key lock</li> <li>• Air kerma dose display</li> <li>• Toggle footswitch</li> <li>• Additional handrails on C</li> <li>• Emergency Switch on C-arm</li> </ul> <p><b>Ziehm Netport DICOM Package</b></p> <ul style="list-style-type: none"> <li>• Includes interface and software for: <ul style="list-style-type: none"> <li>○ Storage Class and Storage Commit</li> <li>○ Worklist Class, including MPPS</li> <li>○ Query Class</li> <li>○ Media Class</li> <li>○ DICOM viewer software with auto-run for DVD or USB</li> </ul> </li> </ul> <p><b>Video Output Connector(s)</b></p> <ul style="list-style-type: none"> <li>• CCIR (50Hz) connector provides signal for stand-alone printers or standard resolution monitors</li> <li>• Two video connectors for external DVI display for left and right monitor in landscape mode</li> </ul> |
| <b>1</b>   | Sony UP-990 paper/ film printer integrated in Monitor Cart  |
| <b>1</b>   | <b>Z-Academy Care</b> "Service Training Tuition"<br>Hotel and airfare included  |
| <b>1</b>   | <b>Z-Complete Care</b><br>"After Warranty Parts & Labor, including Glassware"   |

## ***SYSTEM OPTIONS***

| <b><i>Qty</i></b> | <b><i>Description</i></b>   |
|-------------------|---|
| <b>1</b>          | Additional Vision Center Control Panel, rail mounted (for tableside mounting)   |
| <b>1</b>          | Measurement functions   |
| <b>1</b>          | DVD-RW Drive  |
| <b>1</b>          | Ziehm Netport DICOM software Image-Retrieve   |
| <b>1</b>          | Removable Grid for RFD 20x20  |
| <b>1</b>          | Ziehm Netport DICOM software Print-Class  |
| <b>1</b>          | Ziehm WLAN W1 Kit (one access point at the Monitor Cart) NOTE: The possibility of integration into an existing WLAN network has to be confirmed by Ziehm Imaging individually |

| Qty | Description  |
|-----|--|
|     | <p><b>Clinical Operator Training</b></p> <ul style="list-style-type: none"> <li>▪ Up to three days<sup>1</sup> of in-service by Ziehm ARRT certified Applications Specialists for a recommended maximum of six (6) trainees<sup>2</sup></li> <li>▪ Continuing Education <b>(CE) credits</b> from the American Society of Radiologic Technologists are available for those X-ray technologists who successfully complete the training course</li> </ul> |