AURORA, CO

PO554-B30026

Minimum Specifications for 1.5T MRI

The Eastern Colorado Health Care System is purchasing a 1.5T MRI Unit for our replacement medical center. This equipment will allow us to provide superior image quality which is very important in the assessment of abnormalities. This high field magnet is an excellent diagnostic tool that will assist providers in the diagnosis of neuro and body image abnormalities. In particular this equipment will be used to assess vascular, neurologic, peripheral and cardiac anomalies in a non-surgical setting. This unit is widely considered a valuable and basic diagnostic tool at all medical facilities.

1.5 Tesla

- ≥ 70 cm wide bore
- ≥ 50 cm coverage
- ≥ 500 lb table capability
- Motion Correction Capability
- Helium Save Technology
- Noise Reduction Technology
- Metal artifact reduction technology
- Power Conditioning as recommended by MRI Scanner Provider
- UPS to maintain total system functionality to allow for adequate time to complete current procedure
- Power conditioning as recommended by the vendor
- HL7 Integration (HIS/RIS)
- DICOM and IHE-Q/R, MWM, STORE COMMIT SCU, and MPPS
- Two detachable tables or trolleys
- VCE ECG (VCG), Respiratory and Peripheral Pulse gating/triggering
- Advanced exam planning technology
- Geometry Linking (multi-station exams)
- Real-Time MIP, MPR, and 3D surface rendering
- Advanced MR viewing environment for viewing, processing and file generation
- Active self-shielding
- Patient specific shimming
- Tabletop integration coil design and ports/Spine coil
- Fat/water separation techniques
- Advanced non-contrast MRA imaging technology
- 3D FSE-based sequence for isotrophic resolution in all contrasts
- Bolus tracing system
- Torso Coil (16 channel or higher)
- Knee Coil (8 channel or higher)
- Shoulder Coil (8 channel or higher)
- Head Coil (8 channel or higher, Trasmit/Receive
- Neuro Vascular Coil (16 channel or higher)
- Run-off Coil (16 channel or higher)
- Foot/Ankle Coil (8 channel or higher)
- Wrist Coil (4 channel or higher)
- Elbow Coil (4 channel or higher)
- MRI compatible physiologic patient monitor with remote display

Advanced Applications

- Complete MRI Cardiac Package
- Complete MRI Breast Package
- Complete MRI Neuro Package
- Complete MRI Ortho Package
- Complete MRI Body Package
- fMRI
- Fiber tracking software
- 32 channel or digital upgrade equivalent
- Integration to 3rd party advanced visualization system

Training

- Pre-installation clinical education for technologists (6 technologists – tuition and travel)
- On-site or off-site clinical applications training for physicians (2 physicians – tuition and travel)
- One week on-site education for technologists for go live (6 technologists)
- One week follow up on-site clinical education and applications training (6 technologists)
- One week additional follow up on-site clinical education and applications training (6 technologists)
- Full Biomed Engineer System MRI training (2 engineers- tuition and travel)

Support and other Documentation to Provide

- Provide DICOM Conformance Statement
- Provide Completed Pre-Procurement Assessment form (6550) and MDS2 Document
- VPN connected remote service and applications support

Desired Items

- Flex coil technology
- Patient comfort focused scanning environment
- MRI safe headphone music system for patients
- Cardiac Coil (8 channel or comparable)
- Breast Coil (8 channel or comparable)
- Complete advanced visualization package (thin-client)