VAMC RENO, NV
PO# 654-B30011

Item No.	Qty.	Description
1	**1**	Optima MR430s 1.5T Dedicated MRI System Optima MR430s 1.5T Dedicated MRI System 1.5 Tesla musculoskeletal MRI unit is designed specifically for imaging of the extremities; hand, wrist, elbow, foot, ankle, and knee. The unique, open magnet design provides high field resolution imaging optimized for the extremities and can be sited in as little as 222 sq. ft. of space. Magnet System: • 1.5 Tesla active shield, superconducting magnet, with passive shims. • Homogeneity: 16cm diametrical spherical volume. • Fringe field: 5 Gauss line 1.85m axial x 1.15m radial. • Field stability: < 0.1 ppm/hr. • Magnet weight: < 745 lbs. Gradient System: • 70 mT/m coil strength. • 300 T/m/s slew rate. • 350 microseconds rise time. • Patient friendly, quiet technology: < 100 dBIA). RF Quadrature Transmit/Receive: • Frequency: 63.8 MHz. • RF power: 2,000W peak rms, 75W average. • Image BW: Variable 5kHz - 118kHz. • Preamp noise fig: < 0.5 dB 2/8

Item No.	Qty	Description

RF Coils Included:

- 180 mm RF Coil: Removable quadrature volume, transmit and receive coil for lower extremity, such as foot, ankle, and knee.
- 160 mm RF Coil: Removable quadrature volume, transmit and receive coil for upper or lower extremity, such as knee, foot, and large elbow.
- 123 mm RF Coil: Removable quadrature volume, transmit and receive coil for upper extremity, such as hand, wrist, and elbow.

Computer System:

- PC based, Core 2 Duo Processor, 2.4 GHz minimum.
- 80 GB removable hard drive host computer.
- 400W power supply.
- Windows XP embedded OS with firewall security protection.
- Anti-Virus software compatibility.
- 9.4 GB total (4.7 GB each side) DVD-R/W long-term archival system.
- PC keyboard and serial mouse.
- 19 inch LCD panel Monitor.
- Reconstruction: 2D < 200 msec/image, 3D < 1 sec/plane.

Imaging Capabilities:

- Spin Echo and Fast Spin Echo.
- Gradient Echo.
- Driven Equilibrium Sequences.
- 2D and 3D.
- Inversion Recovery.

Item No.	Qty	Description	
			Fat Suppression.

- RF Spoiling.
- Spatial Saturation.
- Flow Compensation.
- Automatic Sequential Scans.
- Magnetization Transfer.
- Single and Double Oblique imaging with use of graphical slice selection.
- Slice Interleave.
- Auto Minimum TE.
- No Phase Wrap.
- Rectangular FOV.
- 4cm - 16cm FOV in 1mm increments.
- Slice thickness: 2 mm-10 mm in 0.1 mm increments for 2D, and 0.5 mm-10 mm in 0.1 mm increments for 3D.
- Variable matrix from 64 to 512 in phase and frequency.

Image Review:

- Auto display.
- Multiple image display.
- Window/level.
- Pan/zoom.
- ROI.
- Annotate.
- Measurements.
- Multi planar reformat.
- Simultaneity of scan.
- Reconstruction.
- Image Display.
- Filming.
- Archiving.
- DICOM transfer.

Item No.	Qty	Description	
		• DICOM Worklist for transfer of patient data from facility information system to MSK Extreme.	
		Ergo Patient Handling System: Manually positioned, free floating cushioned chair with lock-in-position brakes, adjustable seat and back inclination. Supports patient weight up to 350 lb.	
		Ergo Patient Ottoman: Ergonomically designed patient ottoman improves comfort and stability for imaging knees, ankle/foot and wrist.	
		Magnet Monitoring Unit (MMU): Sentry remote magnet monitoring system with integrated auto sensor circuitry and virtual magnet monitoring unit enhances remote surveillance with improved direct access for service monitoring via Internet/phone.	
		CD Drive with Read/Write Capability: Transfers patient study to CD, and includes PC compatible viewer.	
2	1	60 Hz Compressor 60 Hz Compressor	
3	1	1.5T 75' Console Cable Kit 1.5T 75' Console Cable Kit	.
4	1	1.5T 25' Compressor Cable Kit 1.5T 25' Compressor Cable Kit	.
5	1	1.5T 25' Penetration Panel Cable Kit 1.5T 25' Penetration Panel Cable Kit	.
6	1	10 meter Flexline Kit	

Item No.	Qty	Description
		10 meter Flexline Kit
7	1	MSK, 500 ml QA Phantom
		MSK, 500 ml QA Phantom
8	2	RF Coil Holder (Supports 3 Coils)
		RF Coil Holder (supports 3 coils)
		Mounts on the wall. Mounting screws and instructions are included. Each coil holder supports 3 coils. Quantity of 2 is needed to hold all 6 coils.
9	1	Optima MR430s 3.54 Software
		Optima MR430s 3.54 Software
		Optima MR430s operator console software Version 3.54 with English user interface.
10	1	Language Kit - English
		Optima MR430s Language Kit - English
11	1	Optima MR430s 3.54 Operator Manual
		Optima MR430s 3.54 Operator Manual
12	1	1.5T MR430s 80mm High-Res RF Coil
		1.5T MR430s 80mm High-Res RF Coil
		Provides maximum SNR, excellent image quality, and patient comfort for imaging small extremities, such as hand, fingers and wrist.
13	1	1.5T MR430s 100mm High-Res RF Coil
		1.5T MR430s 100mm High-Res RF Coil
		Provides maximum SNR, excellent image quality, and patient comfort for imaging small to medium size extremities, such as hand, wrist and

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		elbow.
14	1	1.5T MR430s 145mm High-Res RF Coil 1.5T MR430s 145mm High-Res RF Coil Provides maximum SNR, excellent image quality, and patient comfort for imaging medium size extremities, such as elbow, foot, ankle, and small knee.
15	1	Coated Knee Rest - 7 in. x 15.25 in. x 28 in. Coated Knee Rest - 7 in. x 15.25 in. x 28 in. This Polyscan-coated knee rest measures 7 in. x 15.25 in. x 28 in and is the same as the knee rest provided with the E8823A MR positioning kit...H
16	1	Coated Extremity Rest - 6.5 in. diameter x 11.5 in. Coated Extremity Rest-6.5 in. diameter x 11.5 in This Polyscan-coated extremity rest measures 6.5 in. diameter x 11.5 in. and is the same as the extremity rest provided with the E8823A MR positioning kit...H
17	1	Coated Rectangle Elbow Pads - Set of 2 Coated Rectangle Elbow Pads - Set of 2 This set of 2 Polyscan-coated elbow pads measure 0.5 in. x 9 in. x 19.75 in. and are the same as the elbow pads provided with the E8823A MR positioning kit...H
18	1	7-Day Optima MR430s Onsite Training 7-Day Optima MR430s Onsite Training

Item No.	Qty.	Description
		7-day onsite training for the Optima MR430s scanner. Training is delivered in 2 visits, one 4 day visit and one 3 day follow-up visit, 8AM to 5PM Monday through Friday. Days are provided consecutively and include TELL expenses. This training program must be scheduled and completed within 12 months after the date of product delivery.