

V.A. Medical Center
1601 SW ARCHER ROAD
GAINESVILLE, FL 32608-1135

PRICE INCLUDES DE-INSTALLATION
AND REMOVAL OF PHILIPS EASY
OPTIMUS RF ROOM SERIAL
#SN02.10.036 AND OVERHEAD TUBE
SERIAL #SN02.10.045 AT NO
CHARGE.

PO# 573-B35007

QUANTITY	DESCRIPTION		
Qty 1	<p>SHIMADZU Medical Systems SonialVision Safire Universal RF System with Tomosynthesis and Slot Beam Radiography and Single Wireless Flat Panel DR Detector. System Configuration FED-SVS-1W</p> <p>Universal Tilting / Elevating Radiographic / Fluoroscopic table with the following features:</p> <ul style="list-style-type: none"> • 89 Degree Vertical to 89 Degree Trendelenberg with continuously variable speed tilt • Soft start and stop inverter drive motors • Maximum tilt speed 90 degrees in 15 seconds • Flat 235 X 76.5 table top • Table Fully Functional with Patient Load up to 500 pounds and 700 pounds in case that the patient is lying horizontally and stationary • Carbon fiber reinforced plastic (CFRP) table top for low attenuation • Lateral Table to movement: • 25 cm for peripheral studies (no longitudinal movements) • Vertical table top movement: • ZS-100I 47 to 110 cm • All Digital Carriage, without SPOTFILMER. Enables the following: • Improved image quality • X-Ray dose reduction • Enhanced field of view (closer to patient) • 4 field Ion Chamber • Footrest • Shoulder rest • Footswitch • Compression Cone – motor driven • Hand grips • Table Mattress • Barium Cup holder • Compact and ergonomic design allows mounting only 4 inches from back wall • 700 pound static table horizontal capacity • All motions at 500 pound rating. • 5 per second maximum tilt speed. <p>UD150B-40 Radiographic/Fluoroscopic High Frequency Inverter X-Ray Generator with the following features:</p> <ul style="list-style-type: none"> • High Frequency, 50 kHz inverter • 80kW Radiographic Rating 		

- Micro processor Controlled
- LCD Touch Panel
- Advanced Anatomical Programming with 400 programs
- Two-Point (kV / mA) and three point (kV / mA / t) manual techniques and manual AEC / APR override capabilities
- Radiographic kV 40-150 Continuous
- Radiographic mA 10-1000 mA
- Time selection .001-10 seconds
- Detailed Exposure Factor settings with 12.5% increment exposure time or mAs
- Fluoroscopic kV 50 – 125 kV continuous
- Fluoroscopic mA 0.3 – 20 mA
- Fluoro Brightness Stabilizer
- Fluoroscopic Timer
- Exposure counter
- Anode heat calculator
- Compact, space saving control console, desk or wall mount
- Two X-Ray tube compatibility
- Requires 480 VAC, Three Phase power
- Automatic Exposure Control (AEC)
- High Speed Starter
- Digital Spot Control Board
- Pulsed Fluoro
- 9BCu Phantom

Tablesides (Local) Console with Console Cart and Foot Switch for Procedure Room with the following features:

- Image reversal (black/white, left/right, up/down)
- Fluoro image record
- Print function
- Multi-image display (1, 4, 16 frame selection)
- Multi-function Shuttle Dial (selection of any reference image, window center/window level adjustment)
- Pulsed Fluoro selection (option)
- APR selection (up to 7 items selectable)
- Fluoroscopic timer reset
- Film Density selection
- Memory Shot
- Motor driven Compression Cone
- BOLUS CHASE Table Movement Select Function

17"x17" Flat Panel Imaging Receptor

SAFIRE Flat Panel Detector Technology System

- Direct Conversion dynamic Flat Panel Detector SAFIRE
- Direct conversion technology
- 150 micrometer pixel technology for sharp diagnostic visualization

- Superior spatial resolution (MTF)
- Spatial resolution: 3.3 lp/mm
- 17 x 17 inch Full imaging field of view , edge to edge
- Acquisition frame rate: Max. 15fps
- High resolution image acquisition with dose reduction
- 2880 x 2880 matrix size for 17 inch
- Images obtained as 14 bit data and stored with a digital processing device as 12 bit data with out losing any image information
- Pulsed Fluoroscopy: High resolution, Low Dose
- Pulsed Fluoroscopy: Frame Rates: 3.75, 7.5, 15, or 30 fps
- FOV: Magnification (1) 43cm(17") sq, (2) 38.1cm(15") sq, (3) 30.5cm(12") sq, (4) 22.9cm(9") sq

Includes :

- Amorphous-Selenium Direct Conversion 17 inch Flat Panel Detector
- Shimadzu Advanced Flat Imaging Receptor
- Panel Control Unit
- Power Supply
- Water Chiller Unit

Digital Filter

- Suppresses halation and thereby greatly increases the visibility of blood vessels and devices
- Enables high-contrast images to be obtained with out a compensation filter

Fluoroscopic X-Ray Tube:

- 750,000HU, 0.7 X 1.2 Focal, Grid Controlled Pulse Fluoroscopy
- Pair High Tension Fluoroscopic Cables
- R50 Polygonal Automatic collimator

DAR-8000F Shimadzu PC Based high-throughput Digital RF System

Includes:

- Max 2880x2880 (17"x17") Spot Image Acquisition
- Max 1440x1440 (17"x17") Serial image Acquisition at 15 fps
- Auto-Calibration, and image quality analysis/measurement software
- PC Tower electronics enclosure: 20" high x 9" wide x 26" deep
- High speed CPU
- Disk drive stores 20,000 images at 1024x1024
- Windows operating system with intuitive graphic user interface
- PC keyboard with hotkeys

- Windows compatible wheel mouse
- Incorporated UPS
- CD-ROM drive
- Incorporated Scan Converter for Secondary Image Archive Device

Monitors

- 19 inch 1280 x 1024 Flat Panel Monitor for Procedure Room
- 19 inch 1280 x 1024 Flat Panel Monitor for Control Room

Acquisition

Spot Acquisition (Original matrix mode)

- 2880x2880 matrix 12 bit (View field: 17"x17" (43cmx43cm))
- 2560x2560 matrix 12 bit (View field: 15"x15" (38cmx38cm))
- 2048x2048 matrix 12 bit (View field: 12"x12" (30cmx30cm))
- 1536x1536 matrix 12 bit (View field: 9"x 9" (23cmx23cm))
-

Spot Acquisition (Normal mode)

- 1440x1440 matrix 12 bit (View field: 17"x17" (43cmx43cm))
- 1280x1280 matrix 12 bit (View field: 15"x15" (38cmx38cm))
- 1024x1024 matrix 12 bit (View field: 12"x12" (30cmx30cm))
- 768x 768 matrix 12 bit (View field: 9"x 9" (23cmx23cm))

Serial Acquisition

- 17"x17": 15fps (1440x1440 matrix 12 bit)
- 15"x15": 15fps (1280x1280 matrix 12 bit)
- 12"x12": 15fps (1024x1024 matrix 12 bit)
- 9"x 9": 15fps (768x 768 matrix 12 bit)

Real-Time automatic image optimization

- Customizable fields for faster exam set-up

Fluoroscopy

- Fluoro Loop(commonly for video swallows): 100 frame per run
- Expanded Edge Enhancement for incredibly sharp images
- Last Image hold or real-time fluoro store
- Integration with motion correction

- Continuous Fluoroscopy at 30fps
- Pulsed Fluoroscopy at 30/15/7.5/3.75 fps

Processing

- Customizable fields allow exam settings to be pre-programmed to
- Individual doctor's specifications making for one-click exam setup
- Auto-image optimization and hardcopy
- Instant access to all images on line
- Extensive group of post-processing features for optimal image Quality
- Gamma Selection from 10 kinds of non linear contrast curve
- Horizontal / Vertical Conversion
- Recursive Filter Noise Reduction
- 13 x 13 Template filter processing Edge Enhancement
- Zoom up to x 2
- Multiple Image Display (2x2, 4x4)
- Annotation for overlay display text and figure
- Distance Measurement on the image
- Auto Image Optimization & Hardcopy
- Background Multi-Tasking hardcopy, Allows simultaneous
- processing and printing during acquisition
- Measurement Tools

Hardcopy

- DICOM 3.0 network interface kit (includes print class, storage class, Modality Worklist class.)

Area Dose Monitoring System

- PTW Diamantor M4 System

Diamantor circular transparent chamber is mounted to collimator

Dual Monitor Suspension (without CH200/200M)

- Dual Flat Monitor type, 24" C'Balanced height with Swing arm & 8' 10" rail.
- 4'0" Cable Carrier Kit

One-Zone Ceiling Mount Radiation Shield

- Center Mount Acrylic Shield 60 x 80cm with cutout

Canon CXDI 70C 14" x 17" Wireless DR Detector Subsystem***Includes the following:***

- Scintillator: Cesium Iodide
- Pixel Pitch: 125 microns
- Pixels: 2,800 x 3,408 (9.5 million)
- Imaging Area: 14 inches x 17 inches (35 cm x 43 cm)
- Battery Performance: 140 images (@100 sec cycle, 1 sec sleep)
- Wireless Standard: IEEE 802.11N

Also Includes:

- 1 - CXDI-70C Wireless imaging unit
- 1 - Operation manual
- 2 - Battery Packs

Bundled Package Includes:

- 20.1" Medical Grade Touchscreen LCD Monitor
- Wireless Access Point
- Power Injector for Wireless Access Point
- Infrared Check-In Unit
- Gigabit Ethernet Switch
- Wall Holder for CXDI-70C Wireless + Grid
- (2) 550VA Uninterruptible Power Supplies

Image Acquisition

- A/D: 14 bit
- Grayscale: 12 bit (4,096 gradations)
- Preview Image: 3-5 seconds

Electrical and Environmental

- Voltage: 100V, 120V, 230/240V (50/60Hz)
- Power Consumption: 170VA maximum (Detector unit only)
- Operating Environment: 41-95°F (5-35°C), 30-50% RH (non-condensing)

Physical Characteristics

- Dimensions (WxLxH): 15 inches x 18 inches x 0.6 inch (384 x 460 x 15 mm)
- Weight: 7.5 lbs. (3.4 kg)

Canon Battery Charging Unit

- Charges two batteries at once
- Quick charging, full recharge in <3 Hours from zero
- Indicator lights for when battery is charging and fully charged

Canon CXDI NE Computer Control Station with CXDI application software**Control Station for Canon Control Software NE**

- PC Specifications:
- Intel Core 2 Quad Core CPU
- 4 GB High-Speed RAM
- 500 GB SATA Hard Drive

- DVD/RW Burner (SATA)
- Microsoft Windows 7 64-Bit Operating System
- Optical Mouse
- Full Size Keyboard

Canon Control Software NE
Control Software NE Features:

System Startup & Quality Assurance

- Standard Mode: No log-in required
- Secure Mode: Operator log-in/password required (user authentication); auto time-out with log-in to last screen viewed
- Warm-up time: None
- Calibration Routine: Included; required once per year; configurable on-screen reminder message
- Display QA: SMPTE pattern included

Image Acquisition

- Programming: Unlimited anatomically programmed acquisition settings; user customizable to include annotation, orientation, patient demographics display location, and pre-selected basic and enhancement processing
- Reject/Retake: Reject, Retake, Un-Reject; Reject reason labeling with free or pre-set annotation; Reject log (.csv monthly file accessible to system administrator for rolling 12 months)
- Grid Suppression: Software-based grid suppression
- Protocol Pre-Pack: Allows for multiple APR views to be associated into one APR for easy grouping of views within a study.
- Auto-Stitch (v1.2): Multiple images can be stitched together within the software.

Image Processing

- Basic Processing: Histogram analysis by automatic fixed region ROI or user adjustable ROI; grayscale conversion; adjustable brightness and contrast; 6 pre-set contrast enhancement curves; collimation edge detection and (black) masking with adjustable standoff; trim positioning and adjustment
- MTF Improvement: Preset and user-selectable/adjustable anatomical region-based filters, intensity levels
- Standard Processing: Preset and user-selectable/adjustable DEP (dynamic range adjustment), edge enhancement, noise reduction
- Preset and adjustable multi-frequency dynamic range adjustment; global edge enhancement
- Preset and user-selectable/adjustable dynamic range

- adjustment; noise reduction, local edge enhancement
- Security advancements allow for only select users to access full image processing protocols.

Data Output and Network Connection

- DICOM Print Format: Multi-format, user selectable pre-exposure and post-exposure formatting; selectable printing method (fixed ratio, life size, reduction, fit to film); queue viewable with priority and cancel capabilities; up to 2 DICOM printers may be specified at any one time, up to 4 DICOM printers may be configured
- Study transmission: Selectable modes - after each image, after study end, post-study retrieval with resend individual or all image capabilities; queue viewable with priority and cancel capabilities; up to 2 storage devices may be specified at any one time, up to 4 storage devices may be configured
- CD Archive: Available as network selectable storage device with DICOMDIR (hardware not included)
- Network: Ethernet 10/100/1000 Base T, RJ45 standard
- Data Output: DX; DICOM 3.0 compliant, Print Management Service Class (SCU), Storage Service Class (SCU) and others
- IHE Profiles: Basic Security Profile option - User Authentication, Audit Log, Time Synchronization, Node Authentication

DICOM Modality Worklist for Canon CXDI Digital Radiography systems is a communications module for acquiring patient information and exam requirements from the HIS / RIS. The following features are available in this module:

Study Information Acquisition

- Study is configurable to include a wide variety of patient information such as name, sex, birth date, age, patient ID, accession number(s), referring physician, etc.
- Find Mode is available and conforms to Modality Worklist SOP Class (MWL).
- Patient information can be entered manually if the patient does not appear on the worklist.
- When used with a portable imaging unit, the worklist can be downloaded and stored in the control computer eliminating the need for network access at the patient's bedside. A barcode reader (not included) can be used to find and select the patient from the worklist.

Study Status Notification

- Supports Modality Performed Procedure Step SOP Class (PPS) with in progress, completed, or discontinued messages.
- PPS is available for both suite and portable imaging
- Multi-accession imaging

Imaging Modes

- Manual imaging mode allows the user to individually select each view to be acquired
 - Program imaging mode uses the study information sent by the HIS / RIS to pre-configure the exam(s) to be performed
 - Images can be acquired in any order
 - Additional views can added at any point in the exam
 - The study can be ended without completing all views
 - 100 views can be acquired for a single patient
 - Exams and views can be customized to meet the needs of the facility
- * Requires Program Imaging Mode Set Up and Implementation Fee

Optional DICOM tags can be defined, displayed, printed, and transmitted to PACS.

Pregnancy Status can be received from HIS / RIS and an alert displayed to inform the user of the pregnancy status.

Storage Commit function is available.

Tomosynthesis

Tomosynthesis technique enables to create volumetric planigraphic image with pulsed X-ray projection, in one swipe of X-ray tube movement.

- At any table tilting angle from -89deg to 89deg position
- X-ray tube swing angle; 40, 30, 20, and 8 degrees
- 74 projection at one sweep
- X-ray tube and FPD movement; 5 sec for a sweep
- Center height of tomosynthesis image; 0 to 250mm at 1mm step
- Tomosynthesis reconstruction range; 0 to 300mm
- Magnification display can be set at 100, 110, 120, 130, 150, 170 and 200%

Slot Radiography

By using Highest dynamic range, Direct Conversion FPD, Slot Radiography enables to have long-view Radiography in digital for whole chest, whole leg, or spine curvature study.

With the following features:

- Dose Reduction compared with CR.
- Smooth and whole view including lung through bone by large dynamic range

- High Contrast images by reducing scattering x-ray
- Maximum 55 inches long (x 17")
- SID59"(150cm), 47"(120cm) available.
- Scan with oblique projection is available at SID47" positioning
- Normal mode Scan speed: 7.5cm/sec, High Speed Mode: 15cm/sec
- Magnification : 100, 150, 200, and 300%
- 2 Points measurement for angle of curvature

Side Station – Image Review Station

Workstation required to operate Slot Radiography or Tomosynthesis.

- DICOM Storage Option
- 19 inch Flat Panel Display
- Foot Stand for Flat Panel Display

TIMS Fluoro capture

- TIMS 2000 DICOM System
- 17" LCD Display
- Mobile Cart for TIMS, FPM with LCD arm
- Small shelf for PC
- Mouse swingout Support

Interphone & Microphone Package 2-Way Intercom System

- Full Open Duplex / PTT Intercom Master Station
- Wall Mount Speaker
- Flush Mount Electret Microphone with 10 meter cable.

Pure Power for Safire

PurePower, Power Control and Distribution Unit for Safire

Pre-Installation Site Planning, Preliminary and Final Architectural Drawings. Project Planning with your Project Team.

On-Site Installation and testing for proper operation of all components of this proposal. Estimated 3 Week installation.

On Site Applications Training on Shimadzu Equipment – 10 Days. Includes SonialVision, Safire Panel and Advanced Applications, and Canon DR Detector.

One Year Warranty from date of installation complete, includes all Parts, Glass and Labor.

De-installation, removal from premises and disposal by a licensed contractor, of existing Philips Easy Optimus RF Room Serial #'s SN02.10.036 and Overhead Tube SN02.10.045 . Offered at no charge with acceptance of this proposal.

Warranty: **12 Month Standard Warranty**

Installation: **Included in a site prepared to Shimadzu specifications**

Terms: **0% Upon order acceptance
80% Upon system delivery
20% Upon installation completion**

Freight: **FOB, Destination, Within Consignee's Premises**

OPTIONAL ITEMS

Pricing not included in Proposal

CH-200M RadSpeed Ceiling Tube Mount (Front Mount)

- Large / Clear Digital Display
- V / H (vertical / horizontal) angle display conversion
- Eight programmable switches for locks (user customizable)
- Easy-to-clean surfaces
- Unique "Steering Wheel" design for easy tube positioning
- Positive touch release operation handles for quick positioning
- One-button full-way motion release
- Three way lock release, vertical lock release and collimator light switches on the rear of the tube suspension
- Spring balanced for easy movement
- Reliable locking system allows any angulation to be held in position
- Over Table X-Ray Tube; 400 KHU; (12 degree, 0.6 X 1.2 Focal)
- R-20J manual collimator
- Aluminum rails ensure smooth operation
- Long vertical travel – 160 cm (5' 3")
- 200/(208)/220/230/240V 1 kVA Single-phase incoming line
- **4.0 Meter Ceiling Rails**
- Longitudinal rails 4.0 meters (13' 1")
- Longitudinal Travel – 295 cm (9' 8") (286 cm w / Tomo)
- Transverse Rails –260 cm (8' 6")
- Transverse Travel –200 cm (6' 7")

***The base proposal includes Dual Monitor Suspension (without CH200/200M) Item #'s ID1000F2 & ID4.0CCK
These Items would be replaced with the following Item #'s and Cost for Dual Monitor Suspension (with CH200/200M)
if the Optional Item - CH200M - is selected.***

Dual Monitor Suspension (with CH200/200M)

- Dual Flat Monitor type, 24" C'Balanced height with Swing arm for X-Y transverse rail.
- X-Y 6' 8" adapter for Shimadzu CH-200 with 1.1 meter fixed rail spacing
- 4'0" Cable Carrier Kit

If Dual Monitor Suspension (with CH200/200M) is selected in addition to the cost of Item CH200M the Net Difference would be

BR-120T RadSpeed Tilting Wall Bucky Stand

- Extensive Vertical Travel to accommodate all patient ranges and studies
- Vertical travel: from 62.7 cm to 214.7 cm (24.68 to 84.5 inch)
- Three-Field AEC Sensor System
- Standard Aluminum Grid; 10:1, 40 line/cm, 48-72" focal distance
- Wall Stand Mounting Bracket

Overhead Handgrip (BR-120/120T)