



**Shimadzu RadSpeed (Auto) 80kW Dual Wireless Detector
Digital Radiographic (DR) System with Advanced
Positioning Features**

RadSpeed Elevating Radiographic Table:

- Horizontal, elevating radiographic table
- Vertical Table Travel: From 54cm to 85cm (21.25" to 33.5")
- Four (4) way floating top: From 115cm longitudinal travel, and +/- 12.5cm transverse, Flat table top construction, Maximum patient load of 295kg (650 lbs)
- 200/(208)/220/230/240V 1 kVA Single-phase incoming line
- Permanent Electromagnetic locks; locked without power
- Table Top Collision Protection Sensor
- Small pedestal footprint
- Standard Aluminum Grid (10:1 Ratio; 40 lines/cm; 40" focal distance)
- Convenient and safe foot controls for elevation and locks
- Designed to meet US
- Bucky Travel 40cm
- Bucky with Photo timer; 3 field
- **Table Locking Grip Switch – Mushroom Style**
- **Rear Table Foot Switches**
- **Patient Handgrips (2)**

RadSpeed 80kW Generator:

- Three Phase High Frequency inverter
- 80kW Rating, Three Phase
- 380/400/415/440/480 Vac 3 Phase input power 75 KVA
- Color LCD Touch Screen Display
- Large Readout for ease of Viewing
- Jog Dials for Manual Selection
- Up/Down Buttons for Fine Manual Selection
- kV mA, mAs and time adjusted with both up/down or dial
- Easy View "Ready-Up" and Exposure Status Lamps on Generator and Handswitch
- Micro Processor Controlled
- Automatic Exposure control
- kV Range: 40-150 kV in 1kV increments
- mA Range: 10-1000 mA (12 presets per Focal Spot)
- mAs: .5-800 mAs; 500 mAs max with AEC
- Time Settings: 0.001 – 10 seconds

QUANTITY	DESCRIPTION		
	<ul style="list-style-type: none"> ▪ Anatomical Programmed Radiography (APR) ▪ High Speed Starter ▪ Self Diagnostic function with display of error codes ▪ Wall Stand Mounting Bracket <p>RadSpeed CH-200 Auto ceiling Tube Mount (Front Mount):</p> <ul style="list-style-type: none"> ▪ 200/(208)/220/230/240V 1 kVA Single-phase incoming line ▪ Color Touch Screen control panel ▪ Color LCD Touch Screen rotates automatically with tube rotation ▪ Eight programmable switches for locks (user customizable) ▪ Anatomical Programmed Radiography (APR) control at tableside ▪ Easy to clean surfaces ▪ Positive touch release operation handles for quick positioning ▪ One-button full-way motion release ▪ 3 way lock release, Vertical lock release and collimator light switches on rear of tube suspension ▪ Spring balanced for easy movement ▪ Reliable locking system allows any angulation to be held in position ▪ Pop-up information message window on display ▪ Over Table X-Ray Tube; 400 KHU; (12 degree, 0.6 x 12. Focal) ▪ Automatic Collimation System ▪ Vertical Travel – 160cm (5'3") <p>4.0 Meter Ceiling Rails:</p> <ul style="list-style-type: none"> ▪ Longitudinal rails 4.0 meters (13'1") ▪ Longitudinal Travel – 295cm (9'8") (286cm w/Tomo) ▪ Transverse Rails – 260 cm (8'6") ▪ Transverse Travel – 200cm (6'7") <p>BR-120 RadSpeed Tilting Wall Bucky Stand with automatic vertical interlink feature</p> <ul style="list-style-type: none"> • Extensive Vertical Travel to accommodate all patient ranges and studies • Vertical travel: from 62.7cm to 214.7cm (24.68 to 84.5 inch) • Automatic Collimation • Remote collimation control options allows the operator controlling the x-ray field from the patient side • Three-Field AEC Sensor System • Standard Aluminum Grid; 10:1, 40 line/cm, 48-72" focal distance • Wall Stand Mounting Bracket • Overhead Patient Handgrip • Left and Right Side Patient Handgrips 		

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	<p>Canon CXDI-70C 14"x17" Portable/Moveable DR Detector The Canon CXDI-70C Wireless portable, lightweight DR system provides super high resolution, high quality, filmless image capture for a broad range of radiographic applications, including trauma, ICU and bedside exams. The CXDI-70C Wireless is an ISO 4090 compliant cassette size detector that can fit into existing bucky trays, or in new equipment trays with ease. Offering high-quality diagnostic images efficiently with minimal X-ray exposure to patients, the CXDI-70C Wireless is ideal for all radiographic use, especially pediatric. This portable DR system consists of (CsI) scintillator, allowing for extremely effective x-ray absorption and high signal-to-noise performance. The large 14 inch x 17 inch imaging area and portable design – just over a half-inch thick (0.6 inches) and weighing only 7.5 lbs – allow the CXDI-70C Wireless to be especially useful with patients who have limited mobility and for capturing images at angles that are difficult to set with fixed devices. Includes:</p> <ul style="list-style-type: none"> • CXDI-70C Wireless imaging unit • Operation Manual <p>Shimadzu <i>Auto Positioning</i> Feature for advance system movements, set up and procedure applications. Motorized vertical and horizontal tracking to wall and table buckys, advanced digital tomography and customizable procedure positioning.</p> <p>▪</p> <p>Electric Servo Tomo for 1.1 meter Fixed Rails</p> <p>Vertical Tracking Bucky Tracking Option (BK Drive Unit) Click Dog Assy Canon DR Tomo Kit Auto Positioning Kit</p> <p>SID Detection – Transverse Assembly</p> <p>Additional CXDI-70C Wireless Digital Radiography Detector 2.4/5GHz w/ 2 batteries</p> <p>Wireless series Battery Pack (single)</p> <ul style="list-style-type: none"> • <u>(2) Battery Packs</u> <p>1 – Wall Holder for Canon Portable Detector and Grid</p>		

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	<p>Features and Specifications:</p> <p>Detector:</p> <ul style="list-style-type: none"> • Scintillator: Cesium Iodide • Pixel Pitch: 125 microns • Pixels: 2,800 x 3,408 (9.5 million) • Imaging Area: 14 inches x 17 inches (35cm x 43cm) • Battery Performance: 140 images (@100 sec cycle, 1 sec sleep) • Wireless Standard: IEEE 802.11N <p>Image Acquisition:</p> <ul style="list-style-type: none"> • A/D: 14 bit • Grayscale: 12 bit (4,096 gradations) • Preview Image: 3-5 seconds <p>Electrical and Environmental:</p> <ul style="list-style-type: none"> • Voltage: 100V, 120V, 230/240V (50/6Hz) • Power Consumption: 170VA maximum (Detector unit only) • Operating Environment: 41 - 95°F (5-35°C), 30-50% RH (non-condensing) <p>Physical Characteristics:</p> <ul style="list-style-type: none"> • Dimensions (WxLxH): 15 inches x 18 inches x 0.6 inch (384 x 460 x 15mm) • Weight: 7.5 lbs. (3.4kg) <p>1 - Wireless Access Point 1 - X-Ray Interface Unit 1 – Battery Charging Unit 1 – Infrared Check-In Unit 1 – Control Station for Canon Control Software NE</p> <p>PC Specifications:</p> <ul style="list-style-type: none"> • 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 <p>1 – Canon Control Software NE Features:</p> <p><u>System Startup & Quality Assurance:</u></p> <ul style="list-style-type: none"> • 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 • Battery/Wi-Fi Monitor: Software to allow wi-fi strength monitor and battery monitor for CXDI-70C Wireless configurations • Calibration Routine: Included; required once per year; configurable on-screen reminder message • Display QA: SMPTE pattern included 		

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	<p><u>Image Acquisition:</u></p> <ul style="list-style-type: none"> • 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. <p><u>Image Processing:</u></p> <ul style="list-style-type: none"> • 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. <p><u>Data Output and Network Connection:</u></p> <ul style="list-style-type: none"> • 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, 		

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	<p>Audit Log, Time Synchronization, Node Authentication</p> <ul style="list-style-type: none"> 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: <p><u>Study Information Acquisition:</u></p> <ul style="list-style-type: none"> 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. <p><u>Study Status Notification:</u></p> <ul style="list-style-type: none"> Supports Modality Performed Procedures Step SOP Class (PPS) with progress, completed, or discontinued messages PPS is available for both suite and portable imaging Multi-accession imaging <p><u>Imaging Modes:</u></p> <ul style="list-style-type: none"> 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 be 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 view can be customized to meet the needs of the facility Requires Program Imaging Mode Set Up and Implementation Fee <p>Optional DICOM tag can be defined, displayed, printed, and transmitted to PACS.</p> <p>Pregnancy Status can be received from HIS/RIS and an alert displayed to inform the user of the pregnancy status.</p> <p>Storage Commit function is available</p> <p>1 – Gigabit Ethernet Switch</p> <p>1 – (2) APC Back-UPS ES offers affordable battery backup and surge protection for computers. With enough power outlets to protect your entire system, built-in phone/fax/modem line (DSL compatible) protection and easy-to-install safe system shutdown software all make this power protection solution the best value for computers.</p>		

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	<p>Main Features:</p> <ul style="list-style-type: none"> • UPS (external) • AC 120V • 330 Watt • 550VA • 8 output connector(s) <p>1 – Snap-On Grid, 10:1, 132 lpi, 40" – 72" Focus, Carbon Fiber Interspaced</p> <p>XAT-2H Transformer (UD150*-40 for 200-240 Vac 3 phase input)</p> <p>Point-of-Sales FPD extended warranty (total 5 years) per 70C</p> <p>Applications (Three (3) Days Technologist Training)</p>		

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	<p><u>RENOVATIONS DETAILS:</u></p> <p style="text-align: center;">Scope of Work VAMC Durham – Durham, NC Rad Room ED 11 (F1411) Renovation – Shimadzu Radspeed</p> <p>The summary of work for this construction project includes general trade’s work, some concrete, structural, finishes, some mechanical and electrical work to modify the existing space for the proposed new equipment to be installed.</p> <p>Division 1 – General Requirements</p> <ul style="list-style-type: none"> • Provide Project Management. • Provide Site Management & weekly construction meetings. • Provide A&E Drawings. • Provide payment and performance bond. • Provide construction dumpster. • Provide daily and final clean up of the construction area. • Provide final inspection and closeout documentation prior to patient use. <p>Division 2 – Site Work</p> <ul style="list-style-type: none"> • Furnish labor for selective demolition.(including view boxes, cabinets, ceiling, VCT floor covering, wallpaper border, shorten control wall height, etc;) • Provide adequate dust protection as necessary. (including hepa filters) <p>Division 3 – Concrete</p> <ul style="list-style-type: none"> • Furnish labor and material to core bore concrete for electrical conduits and patch and repair floor as necessary. <p>Division 4- Masonry</p> <ul style="list-style-type: none"> • No work in this contract. <p>Division 5 – Metals</p> <ul style="list-style-type: none"> • Furnish labor and material to reuse existing unistrut and add rails for universal system. • Furnish labor and material to install wall support Shimadzu chest stand. • Note. Baseplate and installation by Shimadzu. 		

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	<p>Division 6 – Wood & Plastics</p> <ul style="list-style-type: none"> Furnish labor and material to install 7' base and overhead cabinet in exam.(stainless steel with stainless steel molded countertop with sink) Furnish labor and material to install 20' angled countertop 30" wide at shared control room with 6' high shelves in center.(laminate top) <p><u>Division 7 – Thermal & Moisture Protection</u></p> <ul style="list-style-type: none"> No work in this contract. <p>Division 8 – Doors, Windows, & Glass</p> <ul style="list-style-type: none"> No work in this contract. <p>Division 9 – Finishes</p> <ul style="list-style-type: none"> Furnish labor and material to install new 2x2 (clean) acoustical ceiling tile and grid in exam and control. (at existing current height) Furnish labor and material to install new welded seam sheet vinyl floor covering with 4" flash cove in exam and control. Furnish labor and material to shorten control wall to 7' high and patch lead opening at removal of surge suppressor. (patch and repair wall at view boxes) Furnish labor and material to patch and repair walls in exam and control and prep for paint. Furnish labor and material to paint exam and control. (clean and re-poly doors and paint door frames) <p>Division – 10 Specialties</p> <ul style="list-style-type: none"> No work in this contract. <p>Division – 11 Equipment</p> <ul style="list-style-type: none"> All medical use equipment by others, installed by others. <p>Division – 12 Furnishings</p> <ul style="list-style-type: none"> No work in this contract <p>Division – 13 Special Construction</p> <ul style="list-style-type: none"> No work in this contract <p>Division – 14 Conveying Systems</p> <ul style="list-style-type: none"> No work in this contract <p>Division – 15 Mechanical</p> <ul style="list-style-type: none"> Furnish labor and material to rework 4-sprinkler heads in exam and 		

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	<p>control.</p> <ul style="list-style-type: none"> Furnish labor and material to install new sink made into stainless steel countertop with new blade type fixtures.(reuse/rework rough-in plumbing) Furnish labor and material to install new supply and return grilles in ceiling of exam and control. (existing hvac assumed to be adequate) <p>Division – 16 Electrical</p> <ul style="list-style-type: none"> Furnish labor and material to rework and/or add new the x-ray in use warning light, door switch, and emergency stop and tie into the new system per the drawings as applicable. Furnish labor for electrical demolition including existing surge suppressor, view boxes, 100 amp breaker and can and any other electrical not to be reused, etc. Furnish labor and material to rework existing and add new electrical duct and conduits as per Shimadzu specifications. Furnish labor and material to install new load side feeder to Shimadzu new equipment in exam. (existing line side feeder is ok) Furnish labor and material to install 2-15 amp dedicated outlets, 2-20 amp dedicated outlets and stub for 2-phone and data drops in control room including termination at 150'. Furnish labor and material to install 75 amp breaker and can in exam. (100 amp breaker at MDP to be reused) Furnish labor and material to install 100 amp. 208 volt load center in exam with 1-100 amp main, 3-20 amp and 2-15 amp breakers included. Furnish labor and material to wire Shimadzu supplied power cabinet. Furnish labor and material to clean, re-lamp and rework existing overhead lights in exam and control. Furnish labor and material to recertify isolated power panel.(no electrical test) Provide final closeout documentation prior to room usage. <p>Exclusions</p> <p>The following items are specifically excluded from this RCS proposal:</p> <ul style="list-style-type: none"> Asbestos testing and/or removal. (RCS will require a letter from the Owner prior to the start of the project as to the existence of asbestos) Building permits. Any work involving doors and windows, hvac (domestic and dedicated) other than specified and medical gas. 		

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	<ul style="list-style-type: none"> Any work involving isolated power other than specified. Any work involving emergency power. Any construction due to State or Local code upgrades. Any upgrades to existing power conditions. Any work involving lead on walls other than specified, ceiling and floor. Any work involving major utilities underneath concrete slab such as electrical, plumbing, etc; Any work involving moving any major utilities such as water, steam, chilled water, medical gas, HVAC duct, etc: (can be done on a cost plus basis if required) Any work involving telephones, computer data, intercom, music, code blue, alarms, or security systems, etc. Emergency power, generator, Automatic transfer switch, and/or UPS system. Physicist analysis and/or report of existing lead shielding; nor any work related to the results of such report. State plan review fees and/or room licensing fees. Any medical imaging equipment and/or the transportation, installation, or de-installation of such equipment. Any other work or service other than those specified in the Scope of Work. <p>Qualifications</p> <p>This Proposal and Scope of Work are qualified by and subject to the following:</p> <ul style="list-style-type: none"> This price is for Shimadzu Medical Systems. Medical use equipment will be by Shimadzu Medical Systems. A clear, unrestricted access route to the construction area will be provided. All work will be performed during normal working hours. Architect's and Engineer's as selected by RCS, Inc. This proposal assumes that the existing floor is of adequate structural design to support the proposed new equipment. The length of the construction portion of this project will be approximately 3-weeks with the provision that RCS will have full access to the area for the full period without any interference from other sources such as the de-install or install process. Any changes to the Scope of Work will be by written change order, only. Any delay time beyond the control of RCS will be considered a 		

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	<p>change order and will be billed on a cost plus basis.</p> <ul style="list-style-type: none"> This price is good for <u>120</u> days. 		

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	<div data-bbox="264 405 902 1062"> <p>Division 7 - Thermal & Moisture Protection</p> <p>Division 8 - Doors, Windows & Glass</p> <p>Division 9 - Finishes</p> <p>Division 10 - Specialties</p> <p>Division 11 - Equipment</p> <p>Division 12 - Furnishings</p> <p>Division 13 - Special Construction</p> <p>Division 14 - Conveying Systems</p> <p>Division 15 - Mechanical</p> <p>Division 16 - Electrical</p> </div> <div data-bbox="250 1199 1122 1476"> <p>— —</p> <p>System includes:</p> <ul style="list-style-type: none"> - 1 Preliminary and 1 Final set of Site Specific Drawings - 4 Days Applications Training with CEU's for qualified RT's + 1 Follow up visit - 1 Year Full Parts and Labor Warranty Provided by CMS Imaging </div>		