

Supported Detectors	Conversion Screen	Communication
DRX-1 3543	Detached Gd2O2S:Tb	Wireless/Tethered
DRX-1C 3543	Deposited CsI (TI)	Wireless/Tethered
DRX Plus 3543	Detached Gd2O2S:Tb	Wireless/Tethered
DRX Plus 3543C	Deposited CsI (TI)	Wireless/Tethered
DRX Plus 4343	Detached Gd2O2S:Tb	Wireless/Tethered
DRX Plus 4343C	Deposited CsI (TI)	Wireless/Tethered
DRX Plus 4343F	Detached Gd2O2S:Tb	Tethered only
DRX Plus 4343FC	Deposited CsI (TI)	Tethered only
DRX Plus 2530C	Deposited CsI (TI)	Wireless only
DRX-L	Detached Gd2O2S:Tb	Tethered only
LUX 35 (May need a MOD on the existing system)	Deposited CsI (TI)	Wireless/Tethered
Focus HD 35	Deposited CsI (TI)	Wireless only with charging
Focus HD 43	Deposited CsI (TI)	Wireless only with charging

X-ray Tube - 1	
Type of x-ray tube	Varian RAD-60
Tube voltage range	40 to 150 kVp
Nominal focal spot size	0.6 and 1.2 mm focal spots
Target angle	12 degrees
Tube cooling rates	Anode cooling rate = 100,000 HU/minute Tube Housing cooling rate = 18,000 HU/minute
Heat storage capacity of anode	400,000 HU
Inherent filtration	0.7 mm Al at 75 kV

X-ray Tube - 2	
Type of x-ray tube	Varian RAD-92
Tube voltage range	40 to 150 kVp
Nominal focal spot size	0.6 and 1.2 mm focal spots
Target angle	12 degrees
Tube cooling rates	Anode cooling rate = 140,000 HU/minute Tube Housing cooling rate = 18,000 HU/minute
Heat storage capacity of anode	600,000 HU
Inherent filtration	0.7 mm Al at 75 kV

X-ray Tube - 3	
Type of x-ray tube	Canon XRR-4631G
Tube voltage range	40 to 150 kVp
Nominal focal spot size	0.6 and 1.2 mm focal spots
Target angle	12 degrees

Technical Specifications DRX-Evolution Plus SystemPublic Classification

Tube cooling rates	Maximum Anode Heat Dissipation=1690 HU/second
Heat storage capacity of anode	400,000 HU
Inherent filtration	1.1 mm Al at 75 kV

Collimator - 1

Automatic collimator	Ralco R 221 DACS <ul style="list-style-type: none"> • Automatic collimation (PBL override capability) • Manual knob control • Digital display of SID, longitudinal and transverse blade position, spectral filter selection (programmable to display inches or centimeters) • 6 pairs of lead faced shutter blades
Light output	Greater than 160 LUX at 100 cm (39.4 in.)
Lamp type	LED
X-ray proofing	< 40 mR/h with X-ray beam = 150 kVp/4 mA. EN 60601-1-3 par. 29.204.3
Inherent filtration	2 mm Al at 75 kV
Additional spectral filtration	0 (none), 1 mm Al, 1 mm Al + 0.1 mm Cu, 1 mm Al + 0.2 mm Cu

Collimator - 2

Manual collimator	Ralco R 221/A DHHS <ul style="list-style-type: none"> • Manual knob control • 6 pairs of lead faced shutter blades
Light output	Greater than 160 LUX at 100 cm (39.4 in.)
Lamp type	LED
X-ray proofing	< 40 mR/h with X-ray beam = 150 kVp/4 mA. EN 60601-1-3 par. 29.204.3
Inherent filtration	2 mm Al at 75 kV

Collimator - 3

Automatic collimator	Ralco R 221 DACS (For Dual Energy) <ul style="list-style-type: none"> Automatic collimation (PBL override capability) Manual knob control Digital display of SID, longitudinal and transverse blade position, spectral filter selection (programmable to display inches or centimeters) 6 pairs of lead faced shutter blades
Light output	Greater than 160 LUX at 100 cm (39.4 in.)
Lamp type	LED

X-ray proofing	< 40 mR/h with X-ray beam = 150 kVp/4 mA. EN 60601-1-3 par. 29.204.3
Inherent filtration	2.3 mm Al at 75 kV
Additional spectral filtration	0 (none), 1 mm Al+ 0.5 mm Ag , 1 mm Al + 0.1 mm Cu, 1 mm Al + 0.2 mm Cu

Dose Area Product Meter (Optional Accessory)

Type	VacuTec VacuDAP 156 00 15
Upper limit of response range	0.8 nC/uGy-m ²
Energy range	40 to 150 kV
Energy response	-6% - 0% over the 50 to 150 kV range
Chamber filter effect	0.2 mm Al (70 kV)

X-ray Generator and PDU Assembly

High-frequency generator	Manufactured by Carestream Health. Model CGN-80	
PDU (power distribution unit)	Manufactured by Carestream Health	
Generator Output	<ul style="list-style-type: none"> • 65 kW high-frequency output with digital feedback control circuitry • Optional 80 kW high-frequency output with digital feedback control circuitry • 40 to 150 kVp • 0.1 to 1000 mAs 	
Range of generator output	<u>65kW</u> 800 mA at 81 kVp 630 mA at 103 kVp 500 mA at 130 kVp 400 mA at 150 kVp	<u>80kW</u> 1000 mA at 80 kVp 800 mA at 100 kVp 630 mA at 126 kVp 500 mA at 150 kVp
Power requirement	380/400/480VAC, 3-phase, 125kVA	
Generator and PDU size	Dimensions (H x W x D) 120.8 cm x 64.5 cm x 57.7 cm (47.6 in. x 25.4 in. x 22.7 in.)	
Generator and PDU weight	245 kg (540 lb) Unpacked	

Console	
Single console integrating exposure control, detector control, and image output	<p>Software, image processing, and DICOM output by Carestream Health</p> <p>Computer manufactured by HP</p> <p>HP Engage Flex Pro (also called HP 5820) with i3 8100 3.6GHz (or better) or Z4 G4 with Intel XEON W-2225 4.1GHz (or better)</p> <p>Memory 16,32 GB</p> <p>Hard drive 512GB, 1TB</p> <p>10/100/1000 BaseT network interface</p> <p>DVD-RW drives</p> <p>Microsoft Windows 10</p> <p>Hard drive option: encrypted hard drive certified to meet U.S. National Institute of Standards Technology (NIST) Federal Information Processing Standard (FIPS) 140-2 Level 2</p> <p>Console PC specifications are subject to change by our workstation supplier. Workstation performance provided will be equal to or better than performance of the Standard or (optional) Enhanced PC below</p>
Patient data entry	Touch-screen monitor; keyboard, bar code or DICOM work list through HIS/RIS (optional)
Selection of exposure	Full exposure parameters can be set manually or AEC (automatic exposure control) can be used. Anatomical programming can be set for a variety of examinations.
Image storage capacity	Up to 10,000 images can be saved for retransmission or reprocessing. Images can be protected; otherwise they are reclaimed on a FIFO (first in, first out) basis. Images can be saved to removable media on a DVD-RW drive.
DICOM 3.0 compliance	<p>DICOM Work List: Comply (option);</p> <p>DICOM Store: Comply;</p> <p>DICOM Print: Comply;</p> <p>DICOM Modality Performed Procedure Step (option);</p> <p>DICOM Store Commit: Comply</p>
Image data output	12-bit log, 14.6 MB
Console Table (optional)	Dimensions (HxWxD): 93.3 cm x 90.0 cm x 60.0 cm (36.7 in. x 35.4 in. x 23.6 in.)
Other components	<p>Interfaces with the detector and the x-ray exposure equipment while providing upstream and downstream connectivity to acquire and transmit patient, exam, and image data in digital format.</p> <p>Detector Portable DRX-1, DRX- Plus</p> <ul style="list-style-type: none"> Preview image is available in <4 seconds (V5.5 SW or later); total cycle time (processing speed) is 20 seconds.

Console	
	<p>Detector Fixed</p> <ul style="list-style-type: none"> • Preview image is available in <3 seconds (V5.5 SW or later); total cycle time (processing speed) is 11 seconds. <p>Acquisition and distribution of data</p> <ul style="list-style-type: none"> • Operator input: log on/log off; patient demographics (add / edit patients); patient accession number, study selection; search by patient name, ID, or visit number; output setup selection (workstations, archives, printers); RIS interface to acquire patient demographic and exam data (optional); and auto transmission of patient/exam/image data. <p>Exposure and image capture</p> <ul style="list-style-type: none"> • Exposure factors for each exam view (programmed default factors with manual overrides; small/medium/large patient size selection; manual technique selection; tube warm-up capability; detector calibration). • Automatic exposure control (AEC) (ion chamber selection; manual control, AEC on/off); Exam Tutor; detector array; detector rotation indicator (for wall stand only); exposure button (prep/exposure control button; audible/visible exposure indicator); and generator on/off. <p>Acquire and process digital images</p> <ul style="list-style-type: none"> • Optimize grayscale display and apply examination specific nonlinear edge enhancement with built-in perceptual tone-scale processing (PTS). • Optional EVP (enhanced visualization image processing) software is available. • Display preview image (apply image cropping; apply image multi-formatting; add image markers, flip and rotate image, enter technologist comments; accept/reject image). <p>Administrative</p> <ul style="list-style-type: none"> • System administrative (create/modify user logon and password; create/modify output printer configurations; manage image output queue; re-send image output; manage local database [view/delete patient image files]; protect selected patient/image files from reclamation; create/modify technologist comments; perform detector array calibration; generate test pattern images for output device QC). • Remote diagnostic service capability via internet connection.

Console	
	<p>Supported image outputs</p> <ul style="list-style-type: none"> Supports output interfaces including DICOM Storage Service Class, DICOM Work List, and DICOM Print Service Class.

Monitor	
Type	Multi-touch IPS panel with LED backlighting
Viewable Image Area	58.42 cm (23 in) wide screen diagonally measured
Display resolution	1920 x 1080, 60 Hz
Viewing angles	Typical 178° horizontal and vertical
Monitor Foot Print	With Stand 59.93 x 6.95 x 40.92 cm (23.6 x 2.7 x 16.1 in) Head only 59.93 x 4.05 x 50.7 cm (23.6 x 1.6 x 16.1 in)

Auto positioning and Motorization / Synchronization	
Programmed Auto Positions (OPTIONAL FEATURE for Fully Automated)	Automatic Positioning of the Overhead Tube Assembly, Table Bucky, and Wall Stand Bucky to any of 128 positions that are programmed by the operator.
Motorization / Synchronization	Automatic Tracking of the Overhead Tube Assembly (X-ray beam axis) to follow the Table Bucky or Wall Stand Bucky position Automatic Centering and perpendicular alignment of the Overhead Tube Assembly (X-ray beam axis) to the Table Bucky or the Wall Stand Bucky position. (Fully Automated only) Automatic Centering of the Table Bucky to the Overhead Tube Assembly (X-ray beam axis) position. Automatic Centering of the Wall Stand Bucky Z axis (X axis with X-rail kit) to the Overhead Tube Assembly (X-ray beam axis) position. (Fully Automated and Hybrid Only)

Overhead Tube Assembly – Fully Automated	
Type	5 axes of motion Manual movement in all 5 axes of motion, Motor Assist available in the x and y direction for a ramped acceleration as guided by the operator Motorized in all axis for auto tracking, auto centering, and auto positioning

Range of movement	<p>Tube rotation around the horizontal axis relative to zero (collimator pointing down) is +135 degrees and –180 degrees</p> <p>Tube rotation around the vertical axis relative to zero is +/- 180 degrees</p> <p>Range of telescope (vertical travel) is 161 cm (63.5 in.)</p> <p>Standard longitudinal rail length of 6 m (19.7 ft.) manual or motorized.</p> <p>Transverse bridge length of 4 m (13.1ft.)</p>
Tall Room Option	Telescope Extension, 15 cm
Controls	Single handle control and individual controls of longitudinal, transversal, vertical, and rotational directions; auto-centering and auto-tracking controls
Display	<ul style="list-style-type: none"> • Large 12.1 inch (diagonal) LCD touch-screen display, indicating: SID, Head Angle, Head Rotation Angle, mAs, kVp, Detector selection, Positioning status and Exam type. • Allows toggling to Patient ID. • Optional OTC Display Package to change techniques/views
Optional accessories	IR Remote

Wall Stand

Range of Movement	<ul style="list-style-type: none"> • Up and Down: from floor to 180 cm • Optional X-Rail: Up to 500 cm • Bucky Tilt: - 20 to 0 to 90 degrees (horizontal) • In horizontal position, Bucky center relative to column = 654 mm • In vertical position, Bucky surface relative to column = 605 mm • Bucky rotation • Bucky Angulation L/R up to 45 deg in 15 deg increments (premium only)
Controls	<ul style="list-style-type: none"> • (Standard) – Vertical brake controls on both sides of wall stand • (Automatic) - Keypad (One Keypad is installed by default. A second keypad can be installed as an option) that can be configured/installed on both the premium wall stand, including motorized up/down and tilting as well as all collimator functions, auto positioning, auto centering, and auto tracking activation.
Motorization (Automatic)	Motorized motion for vertical, tilt, and optional rail drive
Automatic Exposure Control	<ul style="list-style-type: none"> • 5-cell ion chamber if equipped with DRX or DRX Plus detector • 3-cell ion chamber if equipped with non DRX detector
Bucky	<ul style="list-style-type: none"> • The grid is stationary • The grid is removable • Grid present information provided to the console • Bucky housing assembly shaped for comfort in all positions; grids are removable in all convenient orientations (including under table)

Wall Stand	
Grids	<p>One grid provided; additional grids optional:</p> <ul style="list-style-type: none"> • General Purpose: 8:1, 40 lines per cm (103 lines per inch) focus 140cm (55 in.). Interspace material: Aluminum • Near: 12:1; 40 lines per cm (103 lines per inch) focus 110cm (43 in.). Interspace material: Aluminum • Far & LLI (Different Grid Frames): 12:1; 40 lines per cm (103 lines per inch) Center focus 180cm (71 in.). Interspace material: Aluminum • Far & LLI; 40 lines per cm (103 lines per inch) Center focus 180cm (71 in.) Interspace material: fibre • Aluminum clad • 3-slot floor standing grid holder (optional)
Grids (203L Option)	<p>Grid option:</p> <ul style="list-style-type: none"> • General Purpose: 12:1, 80 lines per cm (203 lines per inch) focus 140cm (55 in.) • Near: 12:1; 80 lines per cm (203 lines per inch) focus 110cm (43 in.) • Far & LLI (Different Grid Frames): 15:1; 80 lines per cm (203 lines per inch) focus 180cm (71 in.) • Near-Pediatric: 10:1; 80 lines per cm (203 lines per inch) focus 110cm (43 in.) (recommended for pediatric imaging) • Interspace material: aluminum • Carbon fiber clad • 3-slot floor standing grid holder (optional)
Accessories included	Lateral arm support
Optional accessories	BABIX holder

Fixed Elevating Table (VX3733-TABC)	
Type	Elevating table, with four-way floating flat edge tabletop
Table movement	<ul style="list-style-type: none"> • Tabletop longitudinal travel: 122 cm (48 in.) range • Tabletop transverse travel: ±13 cm (5.1 in.) • Table size 250 cm x 83 cm (98.4 in x 32.6 in) • Table height 52 cm (20.5 in.) minimum, 91 cm (35.8 in.) maximum. • Bucky longitudinal travel: 44 cm (17.3 in.) • Table maximum patient weight: 320 kg (705 lb) • Table maximum static load: 400 kg (881 lb)
Imageable area	<ul style="list-style-type: none"> • Width 63 cm (24.8 inch) • Length 250 cm (98.4 inch) • Tabletop material: HPL • Radio-opacity is 0.7 mm aluminum equivalent at 100 kVp

Fixed Elevating Table (VX3733-TABC)	
Motion controls	<ul style="list-style-type: none"> • Foot pedal operated elevation and tabletop float (double-step activation) • Switch for automatic tracking of OTC longitudinally to Bucky • Switch for auto centering of OTC to Bucky • Indicator for Grid Presence • Option - Foot pedals located on rear of table
Automatic Exposure Control	3-cell ion chamber
Bucky	<ul style="list-style-type: none"> • The grid is stationary • The grid is removable • Grid present information provided to the console • Detector assembly moves out of table for extremity views without tabletop (Grid remains in the table)
Grid	One grid provided: <ul style="list-style-type: none"> • 12:1, 40 lines per cm (103 lines per inch), focus 110 cm (43 in.), Interspace material: aluminum • 12:1, 40 lines per cm (103 lines per inch), focus 110 cm (43 in.), Interspace material: fiber • Interspace material: aluminum • Aluminum clad • 3-slot floor standing grid holder (optional)
Grid (203L Option)	Grid Option: <ul style="list-style-type: none"> • 12:1, 80 lines per cm (203 lines per inch), focus 110 cm (43 in.) • Interspace material: aluminum • Carbon fiber clad • 3-slot floor standing grid holder (optional)
Optional Accessories	<ul style="list-style-type: none"> • Patient hand grips • Compression strap • Table pad • Lateral cassette holder • Tethered Remote

Fixed Elevating Table (VX3733-TAB)	
Type	Elevating table with four-way floating tabletop
Table movement	<ul style="list-style-type: none"> • Tabletop longitudinal travel: 120 cm (47.2 in.) range • Tabletop transverse travel: ±13 cm (5.1 in.) • Table size 240 cm x 83 cm (94.5 in x 32.5 in) • Table height 53 cm (20.9 in.) minimum, 86 cm (33.8 in.) maximum. • Bucky longitudinal travel: 40 cm (15.7 in.) • Table maximum patient weight: 272 kg (600 lb)
Imageable area	<ul style="list-style-type: none"> • Width 63 cm (24.8 inch)

Fixed Elevating Table (VX3733-TAB)	
	<ul style="list-style-type: none"> • Length 202.5 cm (79.7 inch) • Tabletop material: HPL • Radio-opacity is 0.7 mm aluminum equivalent at 100 kVp
Motion controls	<ul style="list-style-type: none"> • Foot pedal operated elevation and tabletop float (double-step activation) • Switch for automatic tracking of OTC longitudinally to Bucky • Switch for auto centering of OTC to Bucky • Indicator for Grid Presence • Option - Foot pedals located on rear of table
Automatic Exposure Control	3-cell ion chamber
Bucky	<ul style="list-style-type: none"> • The grid is stationary • The grid is removable • Grid present information provided to the console • Detector assembly moves out of table for extremity views without tabletop (Grid remains in the table)
Grid	<p>One grid provided:</p> <ul style="list-style-type: none"> • 12:1, 40 lines per cm (103 lines per inch), focus 110 cm (43 in.); Interspace material: aluminum • 12:1, 40 lines per cm (103 lines per inch), focus 110 cm (43 in.); Interspace material: fiber • Aluminum clad • 3-slot floor standing grid holder (optional)
Grid (203L Option)	<p>Grid Option:</p> <ul style="list-style-type: none"> • 12:1, 80 lines per cm (203 lines per inch), focus 110 cm (43 in.) • Interspace material: aluminum • Carbon fiber clad • 3-slot floor standing grid holder (optional)
Optional Accessories	<ul style="list-style-type: none"> • Patient hand grips • Compression strap • Table pad • Lateral cassette holder • Tethered Remote

Fixed Elevating Table (VX3733-TAB320)	
Type	Elevating table, with four-way floating tabletop
Table movement	<ul style="list-style-type: none"> • Tabletop longitudinal travel: 96 cm (37.8 in.) range • Tabletop transverse travel: ±13 cm (5.1 in.) • Table size 216 cm x 83 cm (85.0 in x 32.5 in) • Table height 53 cm (20.9 in.) minimum, 86 cm (33.8 in.) maximum. • Bucky longitudinal travel: 40 cm (15.7 in.) • Table maximum patient weight: 320 kg (705 lb)

Fixed Elevating Table (VX3733-TAB320)	
Imageable area	<ul style="list-style-type: none"> • Width 63 cm (24.8 inch) • Length 178.5 cm (70.3 inch) • Tabletop material: HPL • Radio-opacity is 0.7 mm aluminum equivalent at 100 kVp
Motion controls	<ul style="list-style-type: none"> • Foot pedal operated elevation and tabletop float (double-step activation) • Switch for automatic tracking of OTC longitudinally to Bucky • Switch for auto centering of OTC to Bucky • Indicator for Grid Presence • Option - Foot pedals located on rear of table
Automatic Exposure Control	3-cell ion chamber
Bucky	<ul style="list-style-type: none"> • The grid is stationary • The grid is removable • Grid present information provided to the console • Detector assembly moves out of table for extremity views without tabletop (Grid remains in the table)
Grid	<p>One grid provided:</p> <ul style="list-style-type: none"> • 12:1, 40 lines per cm (103 lines per inch), focus 110 cm (43 in.), Interspace material: aluminum • 12:1, 40 lines per cm (103 lines per inch), focus 110 cm (43 in.), Interspace material: fiber • Interspace material: aluminum • Aluminum clad • 3-slot floor standing grid holder (optional)
Grid (203L Option)	<p>Grid Option:</p> <ul style="list-style-type: none"> • 12:1, 80 lines per cm (203 lines per inch), focus 110 cm (43 in.) • Interspace material: aluminum • Carbon fiber clad • 3-slot floor standing grid holder (optional)
Optional Accessories	<ul style="list-style-type: none"> • Patient hand grips • Compression strap • Table pad • Lateral cassette holder • Tethered Remote

SMART (Optional Feature)	
Required Hardware (Please refer to full Smart Feature specification AC2160 for more details)	<ul style="list-style-type: none"> • Two camera modules (One camera attached to Collimator, other Lateral Position) • Z4 G4 with Intel XEON W-2225 4.1GHz (or better) (Required PC, not included in Smart feature kit) • Full Motorized Overhead Tube Assembly with cable pre-installed

SMART (Optional Feature)	
	(Required, not included in Smart feature kit) • Z-motorized Wall Stand with Bucky Cover supporting Smart Feature (Required, not included in Smart feature kit)
Software Options (Please refer to full Smart Feature specification AC2160 for more details)	• Smart Auto position • Patient Position Monitoring • Smart Patient Positioning • Smart Technique • Smart Collimation • Video Assistance • Audio Assistance

Carestream

"Rx only"