

PERFORM-X DR ATC

Digital Radiographic System with Auto-Tracking



Motorized Auto-Tracking
Optimized Workflow
DR compatible components
Single or Dual Detector systems
Fully automated X-ray room

GENERAL INTRODUCTION

The Perform-X ATC single or dual-panel digital radiographic system has a unique price/performance ratio. The system's excellent, durable hospital-grade components guarantee trouble-free operation for long years. This is the right choice for modern hospitals and imaging centers. The ceiling mounted X-ray tube offers wide operating areas without obstacles, along with the greatest variety of x-ray procedures to perform in this state-of-the-art radiographic room. The latest digital technology both in hardware and software offers quick and precise image acquisition and processing procedures, so this system will cover all needs at busy diagnostic imaging floors.

MAIN COMPONENTS AND TECHNICAL SPECIFICATIONS

HIGH POWER X-RAY GENERATORS

The system is compatible with a range of generators, APEX generators are available 32 – 80 kW, and are built to ensure safe and reliable service for many years. Our generators run on 3# 400 V, though line matching transformers are available for different power lines. The APEX HF SE series (SE is for "stored energy") generators need just 16 Amp single-phase power line and are manufactured in the 32, 40 and 50 kW power range; mAs rating is up to 500 mAs. Wide variety of peripheral equipment can be used with the generators, just to name a few: AEC, high speed x-ray tubes, DAP. Automatic line regulation, full x-ray tube protection, interlock functions, self-checking functions with error messages offer great tools to installers and service personnel.



Our standard system is configured with a 50 kW APEX generator, maximal techniques are 150 kV@250 mA, 100 kV@500 mA, 80 kV@600 mA. The number of stored anatomical programs is virtually unlimited, the user can open always new sections in the program to define new examinations. Two digital detectors can be attached to the system.

High Frequency X-ray generator

Power of the generator	50, 65 or 80 kW please specify your needs
Technical specification	40–150 kV 10–630, 800 or 1000 mA depending on the power of the generator 0.5–800 mAs
APR examinations	Unlimited numbers of examinations, freely programmable
Control of the generator	<ul style="list-style-type: none">Primarily: PC with touch-screen monitor, image acquisition system integrated as wellSecondary: 7 or 10" touch screen monitor at tube housing

PHOENIX VARIABLE HEIGHT RADIOGRAPHIC TABLE

The Phoenix elevating table is a real workhorse in this radiographic system. High load, though esthetic appearance, all movements can be released by the use of foot pedals. Extremely high range for vertical travel, easy patient positioning. Low table top absorption factor.

Phoenix table at maximum height



Phoenix table at minimum height

Elevating radiographic table with 4-way table top

Dimension of the table top	220 x 81 cm (L x W)
Longitudinal travel of the table top	110 cm (to the head 60 cm, to the feet 50 cm)
Cross table top movement	+/- 12 cm
Height of the table top (variable height)	44-90 cm, default values configurable
Vertical movement	AC motor, motorized, thermo control
Rating (weight)	225 kg (distributed load over the table top)
Al absorption factor of the table top	< 0,85 mm Al
Control of the table movements	Foot pedals, (height, longitudinal and cross table movements)

CEILING TUBE MOUNT (CTM)

This tube stand with automated functions will position the x-ray tube in any position set by the radiology assistant. Wide range of movements for a very large selection of x-ray positioning; Easy use of different techniques on the table, on the wall stand or in any special positions when used with a portable (WIFI or wired) detector

Characteristics of the CTM:

- 3 or 4 telescope segments
- Manual and motorized movements
- Counter-balancing system with a set of springs
- Electromagnetic brakes for positioning of the x-ray tube



Ceiling Tube Mount	
Linear movements	<ul style="list-style-type: none"> • Longitudinal travel • Cross-table travel (on bridge) • Vertical travel Tube rotating over horizontal axis • Rotation over vertical axis
Rotational movements	
Control of the CTM	<ul style="list-style-type: none"> • 7" (or 10,4" optional) touch screen monitor on tube head • Brake release push-buttons • Wired or Bluetooth remote control functions (optional) • All movements can be performed simultaneously or one by one
Parameters displayed	<ul style="list-style-type: none"> • SID (FFA), from table/wall detector, or floor, angulation of the x-ray tube, auto-tracking enabled • Generator parameters
Vertical travel range	<ul style="list-style-type: none"> • 150 or 180 cm
Longitudinal	<ul style="list-style-type: none"> • 360 cm (optional + 180 cm)
Cross-table travel range	<ul style="list-style-type: none"> • 216 cm, optional 296 cm
X-ray tube rotation	<ul style="list-style-type: none"> • Over horizontal axis: 330° • Over vertical axis: 340° (w/o detents +/- 180°)
Motorized movements	<ul style="list-style-type: none"> • Vertical movement (standard) • Longitudinal and cross-table movements (optional) • Tube head rotation (optional) • Tube head inclination (optional)
Brakes	DC electromagnetic brakes
Auto-tracking functions (selectable)	a) Focus – wall stand vertical travel
Master – slave configuration selectable if devices motorized	b) Focus – table top (vertical, fixed SID) c) Focus – table detector (horizontal, detector follows focus movement) d) Focus – tilting wall detector (in any angulations)



WS 99 WALL STAND

The WS 99 wall stand has an extended vertical travel of 149 cm, low detector position for extremities. Full-size detectors or CR cassettes are accepted, a docking station can be used for the rotation of 35 x 43 cm devices without removing them from the grid cabinet or bucky device. Double wire ropes guarantee for secure operation. The wall stand can be manual or equipped with motorized vertical movement.

The wall stand is a floor – to wall equipment, though a freestanding option (without wall) is available, so it can be used anywhere in the x-ray room. The optional WS 99T is a tiltable wall stand; range of the detector tilting is $-20^{\circ} + 90^{\circ}$.



WS 99 wall stand

Mechanical structure	Dual rope counterbalancing system, electromagnetic brake, freestanding or floor – to – wall installation
Vertical position of the detector center line	35-184 cm
Detector tilting range	-20° , $+90^{\circ}$, in between fixable in any positions
Detector movements	Vertical: manual or motorized (optional) Tilting: manual or motorized (optional)
Accessories	Patient grips for AP or lateral exposures

ACCESSORIES, SYSTEM

Control-X Medical uses premium components from vendors to make systems complete. We select the best available partners for x-ray tubes, collimators, AEC chambers and high voltage cables. Depending on the system configuration we can customize your system to fulfill all requirements. The specification below reflects our "standard" components for a 50 kW system, please let us know if you need a different configuration.



X-ray tube

Technique	40–150 kV max 74 kW, other tubes available
Size of the focus	Small focus: 0.6 mm Large focus: 1.2 mm
Rotating anode heat capacity	300 kHU (225 kJ)
Anode rotation	Low speed or optional high speed 9000 rpm
Mechanical structure	3" anode, 90° HV horn angle

Collimator

Type of collimator	Manual or motorized, optional automatic collimation
Swivel mount	+/- 180°
Filter change	Manual filter change (Al and Cu)
Voltage	24 VAC

Flat Panel detector

Mechanical structure	35 x 43 cm or 43 x 43 cm, fixed or portable detectors, wired or WIFI (<u>please select</u>)
Scintillation	GADOX or CsI panels
Pixel size	100 – 143 µm depending on manufacturer and model
Number of pixels	Depending on the detector model
DQE	75% @ 0 lp/mm
Bit depth	14 or 16 bit
Preview image	< 4 sec
Mechanical load (distributed)	100 kg
Weight	3,2 – 3,7 kg (depending on model)

Workstation

Control surface	21" touch.screen monitor
Standard	DICOM 3.0
Moduls	<ul style="list-style-type: none"> • Modality Worklist • DICOM Send • MPPS • DICOM Print (other modules available)
Local storage	Min. 5000 images (depending on HDD, it can be different)
Image manipulation functions	<ul style="list-style-type: none"> • Geometrical transformations (rotation, mirroring, Zoom +/- functions), • windowing • Digital collimation • Contrast • Sharpening • Convolution filters • Annotations (text, L/R, measurement of distance, angle mark spots, arrow, circle, polygon etc.)

For more information, please visit our website at www.cxmed.com or contact your local authorized distributor.



Control-X Medical
1755 Atlas Street
Columbus, OH 43228, USA
Tel: 1-614-777-9729
Toll free: 1-800-777-9729
Fax: 1-614-777-0395
E-mail: sales@cxmed.com
Web: www.cxmed.com



www.cxmed.com