



## HM-X-STATIONARY DR SINGLE



HM-X-STATIONARY DR Universal FPD DR is a combination of digital flat panel imaging and classical radiographic mechanical structure. The system fits for most common clinical applications of Radiography in both vertical and horizontal projections, as well as chest examinations, greatly enhance patient throughput.

Absolutely, your filmless workflow will be more convenient and faster than conventional radiographic process. Patients also benefit from low radiation and smooth-running procedures. In addition, the administration of your medical facility will appreciate HM-X-STATIONARY DR's streamlined cost-effective processes and high quality results.

HM-X-DR1000 is fully DICOM 3.0 compliance that means you can benefit from all relevant DICOM services, including DICOM worklist, image storage, transferring, printing and other applications that will significantly improve your workflow.



## 1. Configuration

### Standar Configuration

No.	Component	Quantity
1	High Frequency Generator	1
2	DR Flat Panel Detector 4343RP 4343R	1 1
3	X-ray Tube Assembly	1
4	Radiographic Table	1
5	X-ray Tube Stand	1
5	Chest Bucky Stand	1
6	High-density Aluminum Grid	2
7	Collimator	1
8	HV cable	1
9	Image Acquisition System Computer 23" colorful LCD monitor Acquire v2.0	1
10	Intercom System	1
11	Console	1

### Optional Configuration

No.	Component	Quantity
1	Ion chamber Three fields	1
2	Flat Panel Detector *Replace the detector 4343R in standard configuration	1
3	Monochrome LCD Monitor *instead of the colorful LCD in standard configuration • 19" Monochrome LCD • Resolution: 1280×1024 • Gray scale: 1024	1

## 2. Technical Specification

### Standard Configuration

Component	Specifications
High Frequency Generator	<p>Power: 50kW            Radiography kV: 40~ 150kV; mA Range: 25~ 630mA            Exposure Time: 1ms~ 6.3s, mAs: 0.4mAs~ 630mAs            AEC function, APR: 600 programs            Power Supply: 380VAC±38V, three-phase, 50Hz/60Hz            Power Capacity: 55kVA            Internal Resistance of Power Supply ≤0.17Ω            Resistance of Protective Grounding ≤4Ω</p> <p>Network Integration: By intelligent CAN-BUS communication system, generator control is integrated with image acquisition on a common platform. Display and control of parameters and status of generator is able to be done through generator console and image acquisition system paralleled.            Fault Detection and Diagnosis</p>
FPD Detector	<p>Receptor Type: a-Si            Effective size: 430mm×430mm (17"×17")            Weight: 5.5kg            Pixel Matrix: 3028(h)×3028(v), Pixel size: 142um            A/D converter: 14bit            Spatial Resolution: no less than 3.6lp/mm            Image construction time: 5s            DQE: ≥70%            MTF: ≥58%            Ambient Temperature: -15°C ~ 55°C            Data Transfer: Giga Ethernet            Control Instruction Transfer: Giga Ethernet            Calibration mode: Offset calibration, Gain calibration, error pixel calibration, line noise calibration            internal trigger control mode, applicable to upgrade of conventional system</p>



FPD Detector	Receptor Type: a-Si External Dimensions: 470mm×494mm×38mm Effective size: 17"×17" Weight: 6.5kg Pixel Matrix: 3k×3k, Pixel size: 142um A/D converter: 16bit Spatial Resolution: no less than 3.6lp/mm Image construction time: 5s DQE: ≥70% MTF: ≥58% Ambient Temperature: -15°C ~ 55°C Data Transfer: Giga Ethernet Control Instruction Transfer: Giga Ethernet
X-ray Tube Assembly	Focal Spot: 0.6mm/1.2mm Power: 22/54kW Anode Heat Capacity: 300kHU Target Angle: 12°

DR Mechanics	Radiographic Table Tabletop floating range longitudinal ≥800mm, transverse ≥270mm Bucky travel longitudinal ≥600mm attenuation equivalent < 1.2mmAl Weight capacity: 180kg  X-ray Tube Stand: Longitudinal Travel: ≥2000mm Vertical Travel (tube focus to floor): 650mm~1840mm, motorized, auto-tracking to the vertical Bucky Tube Column Rotation: 0° ~±180° (lockable at 0° and every 90°) X-ray Tube Rotation Along Horizontal Arm: +120° ~-120°  Chest Bucky Stand: Detector center to the floor: no more than 400mm Detector vertical travel range: 1350mm
Collimator	Projection Field (SID=650mm): Max.: 350mm×350mm; Min.:0mm×0mm Operation Mode: Manual
Grid	Size: 457mm×457mm; Grid density: 85 line/cm, Grid ratio: ≥10:1, f0: ≥100cm, Aluminum-based

Image Acquisition System	<p>Hardware configurations:  CPU: Intel Core 2 Duo <math>\geq 3.3</math>GHz  Memory: 2GB, Hard Disk: <math>\geq 500</math>GB, CD-ROM: DVD Burning  System Interface: USB, Standard RS232, LPT, 100MB network Interface, DVI/VGA  Monitor: 23" Colorful LCD Monitor, Resolution: 1920<math>\times</math>1080  OS: Windows 7</p> <p>Software: ACQUIRE  Image Acquisition: Acquisition condition setting, mechanical position display, APR setting  Enhance Filter: Algorithms are optimized according to different physiological structure of body parts and different diagnostic requirements and different clinical demands of doctors.  Image processing: Window width/ level, Auto window width/ level setting, preview, preset Window width/ level, positive and negative image reversal; Image flipping, rotating, zooming, roaming; Image interpolation edge enhancement, restore original image annotation, Character/ number annotation image annotation, Tape measurement, area measurement, auto-sub-setting.  Image Printing: DICOM Printing, Paper Printing, Manually current displayed Images Printing, One-key Printing of Annotated Images, various printing equipment compatibility, film format printing, Print Queue Control, Stop/ Start presetting.  Personalized settings: screen layout, default settings, toolbar settings.  Other functions: Users definable display layout; user definable query of patients and images, patient reservation function. High-speed transmission of no loss compressed images and online decompression</p>
--------------------------	--

Optional Components:

Component	Specifications
Ion Chamber	Three fields, Claymount or Vacutec Exposure time: 1ms~5s, kV: 40~150kV Exposure Dosage Range: 1~100uGy
FPD Detector	Receptor Type: a-Si / csi Size: 512mm $\times$ 495mm $\times$ 43mm Effective size: 430mm $\times$ 439mm Pixel Matrix: 3008(h) $\times$ 3072(v), Pixel size: 143um A/D converter: 14bit Spatial Resolution: 3.7lp/mm, Image construction time: 6s Ambient Temperature: -15 $^{\circ}$ C~ 55 $^{\circ}$ C DQE: $\geq 70\%$ , MTF: $\geq 36\%$ Weight: 7.5kg Data Transfer: Giga Ethernet Control Instruction Transfer: Giga Ethernet Calibration mode: Offset calibration, Gain calibration, error pixel calibration



Optional Components:

<p>FPD Detector</p>	<p>Receptor Type: a-Si            Size: 494mm×494mm×38mm            Effective size: 43cm×43cm (17"×17")            Weight: 7.5kg            Pixel Matrix: 3072(h)×3072(v), Pixel size: 139um            A/D converter: 14bit            Spatial Resolution: 3.6lp/mm,            Image construction time: 6s            Loading Time Range : 1ms-1s            Ambient Temperature: -20°C~ 70°C            DQE:≥70%, MTF: ≥60%            Data Transfer: Giga Ethernet            Control Instruction Transfer: Giga Ethernet            Calibration mode: Offset calibration, Gain calibration, error pixel calibration</p>
<p>Medical LCD Monitor (Mono-color)</p>	<p>Monitor: 19" Monochrome LCD Monitor            Brightness (Max.) 1000 cd/m<sup>2</sup>, Contrast: 900: 1            Picture angle: Level 170°, Vertical 170° (CR &gt; 10); Dot Pitch: 0.294 mm            Resolution: 1280×1024; Grey Scale 1024</p>