

Digital X-ray system

AeroRAD



Maximize efficiency and capacity in your X-ray room

Light handling of X-ray tube, wallstand, floating table top and remarkably lightweight wireless AeroDR flat panel detector allow for easy patient positioning, creating comfortable environment for both user and patient. Konica Minolta DR console CS-7 can link up X-ray exposure condition with x-ray console, which realize faster exposure condition setting by intuitive CS-7 console. Preview your image within 2 seconds, quick preview and cycle times ensure significantly higher productivity.

High quality products, Low maintenance

For X-ray systems high-class components are selected, including reliable microprocessor control high frequency x-ray generator which has worldwide reputation on excellent performance, lifetime and stability. The AeroDR detector features a number of unique characteristics, like the safe and long lasting built-in lithium-ion capacitor and a robust monocoque design. Selecting high quality components minimize maintenance visits and realize a short time installation.

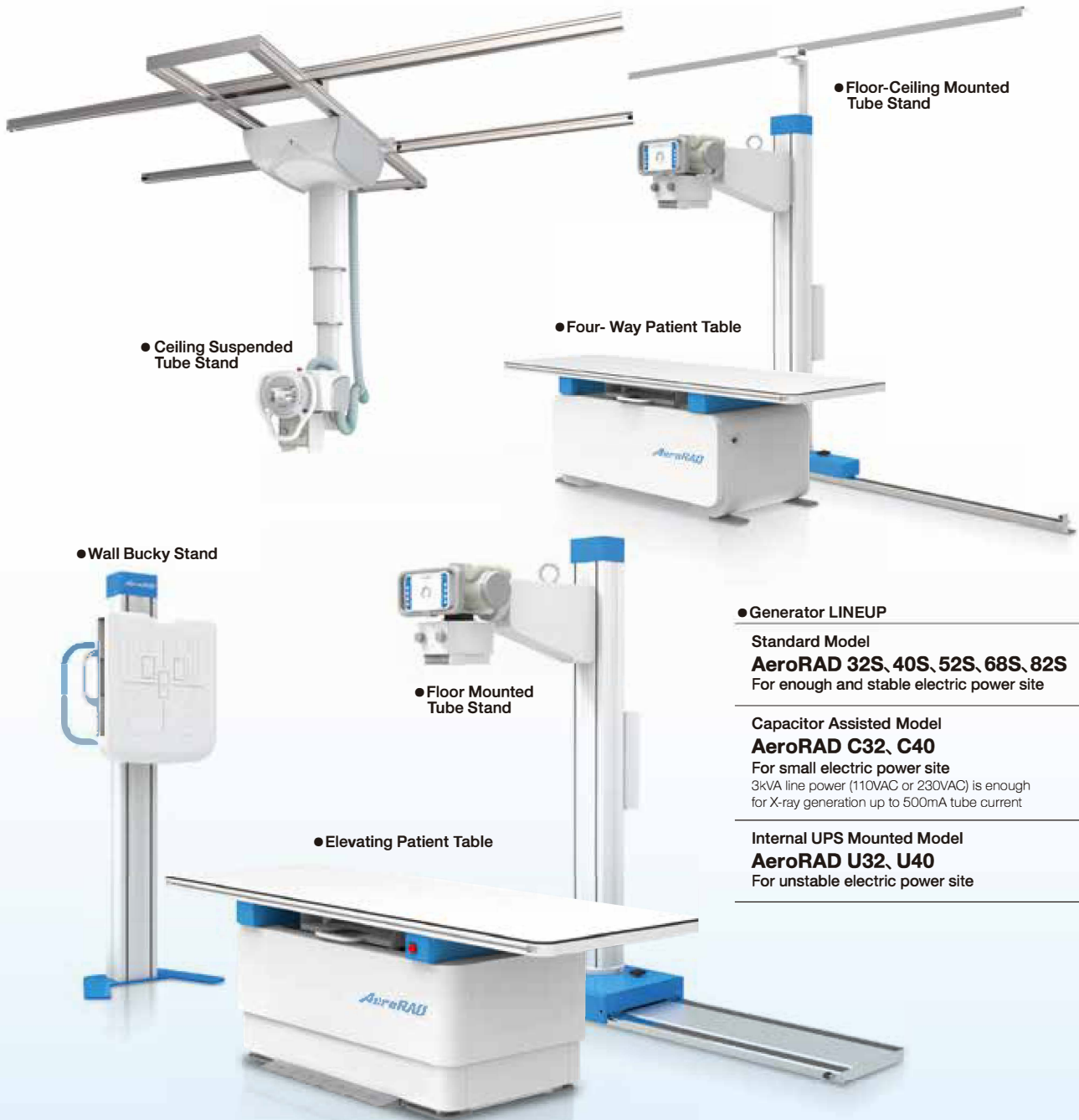
Low dose, Better patient care

The optimal combination of the AeroDR detector using a Konica Minolta CsI scintillator combined with the newly developed low noise readout ICs deliver high quality images at a low dose.



AeroRAD SYSTEM LINEUP

The AeroRAD system is well designed to perform general-purpose radiographic exposure of the whole body parts, and provides comprehensive solution for all your needs.



● Ceiling Suspended Tube Stand

● Floor-Ceiling Mounted Tube Stand

● Four-Way Patient Table

● Wall Bucky Stand

● Floor Mounted Tube Stand

● Elevating Patient Table

● Generator LINEUP

Standard Model

AeroRAD 32S, 40S, 52S, 68S, 82S

For enough and stable electric power site

Capacitor Assisted Model

AeroRAD C32, C40

For small electric power site
3kVA line power (110VAC or 230VAC) is enough
for X-ray generation up to 500mA tube current

Internal UPS Mounted Model

AeroRAD U32, U40

For unstable electric power site

S P E C I F I C A T I O N S

Line powered x-ray generators

System Model	AeroRAD-32S	AeroRAD-40S	AeroRAD-52S	AeroRAD-68S	AeroRAD-82S
Generator Model	GXR-32	GXR-40	GXR-52	GXR-68	GXR-82
Output Rating	32kW	40kW	52kW	68kW	82kW
Line Nominal, Phase	230VAC, 1Φ 400/480VAC, 3Φ	230VAC, 1Φ 400/480VAC, 3Φ	400/480VAC, 3Φ	400/480VAC, 3Φ	400/480VAC, 3Φ
Line Voltage Range	±10% (Frequency : 50/60Hz)	±10% (Frequency : 50/60Hz)	±10% (Frequency : 50/60Hz)	±10% (Frequency : 50/60Hz)	±10% (Frequency : 50/60Hz)
kV Range	40~125kV, 1kV step	40~125kV, 1kV step	40~150kV, 1kV step	40~150kV, 1kV step	40~150kV, 1kV step
mA Range	10 to 400mA	10 to 500mA	10 to 640mA	10 to 800mA	10 to 1,000mA
Timer Range	0.001 to 10 sec, 38 steps	0.001 to 10 sec, 38 steps	0.001 to 10 sec, 38 steps	0.001 to 10 sec, 38 steps	0.001 to 10 sec, 38 steps
mAs Range	0.1 to 500mAs (Optional 640, 800, 1,000mAs)	0.1 to 500mAs (Optional 640, 800, 1,000mAs)	0.1 to 500mAs (Optional 640, 800, 1,000mAs)	0.1 to 500mAs (Optional 640, 800, 1,000mAs)	0.1 to 500mAs (Optional 640, 800, 1,000mAs)
Max. Power Output	400mA@80kV 320mA@100kV 250mA@125kV * Optional 150kV : 125mA@1Φ : 200mA@3Φ	500mA@80kV 400mA@100kV 320mA@125kV * Optional 150kV : 160mA@1Φ : 250mA@3Φ	640mA@81kV 500mA@104kV 400mA@130kV 320mA@150kV	800mA@85kV 640mA@106kV 500mA@136kV 400mA@150kV	1,000mA@82kV 800mA@102kV 640mA@128kV 500mA@150kV
Power Requirement	Minimum 125% of output rating	Minimum 125% of output rating	Minimum 125% of output rating	Minimum 125% of output rating	Minimum 125% of output rating
Minimum Breaker Rating	75A (230Vac,1Φ) 50A (400Vac,3Φ) 40A (480Vac,3Φ)	100A (230Vac,1Φ) 65A (400Vac,3Φ) 50A (480Vac,3Φ)	75A (400Vac,3Φ) 65A (480Vac,3Φ)	90A (400Vac,3Φ) 75A (480Vac,3Φ)	100A (400Vac,3Φ) 90A (480Vac,3Φ)
Rotor Supply	Low Speed Dual Speed (Option for 3Φ)	Low Speed Dual Speed (Option for 3Φ)	Dual Speed (Option for GXR-52)	Dual Speed (Option for GXR-52)	Dual Speed (Option for GXR-52)
Reproducibility	Coefficient of Variation: kV < 0.005, Time < 0.005, mAs < 0.01				
Accuracy	kV < ±(1%+1kV), mA < ±(3%+1mA), Time < ±(1%+0.5ms), mAs < ±(3%+0.1mAs)				
Linearity	Coefficient of Linearity < 0.01 : CL = (X1-X2)/(X1+X2), where X is mR/mAs				
Anatomical Programs	User programmable max. 1,280 programs with APR utility software				
Technique Selection	4 point display (kV, mA, Time, mAs)				
Image Receptors	2 Bucky + 1 Non-Bucky				

Capacitor assisted x-ray generators

System Model	AeroRAD-C32S	AeroRAD-C40S
Generator model	GXR-C32	GXR-C40
Power Rating	32kW	40kW
Line Nominal, Phase	110/120/230VAC, Single phase	
Line Voltage Range	±10% (Frequency : 50/60Hz)	
kV Range	40~125kV(optional 150kV), 1kV step	
mA Range	10 to 400mA	10 to 500mA
Timer Range	0.001 to 10 sec, 38 steps	
mAs Range	0.1 to 500mAs / Requires mA Sliding-down at 500mAs	
Max. Power Output	400mA@80kV / 320mA@100kV / 250mA@125kV Optional 200mA@150kV	500mA@80kV / 400mA@100kV / 320mA@125kV Optional 250mA@150kV
Power Requirement	3kVA	
Rotor Supply	Low Speed (Optional LSS Brake)	
Reproducibility	Coefficient of Variation: kV < 0.005, Time < 0.005, mAs < 0.01	
Accuracy	kV < ±(1%+1kV), mA < ±(3%+1mA), Time < ±(1%+0.5ms), mAs < ±(3%+0.1mAs)	
Linearity	Coefficient of Linearity < 0.01 : CL = (X1-X2)/(X1+X2), where X is mR/mAs	
Anatomical Programs	Programmable 1280 programs with Software	
Technique Selection	4 point display (kV, mA, Time, mAs) : kV/mAs, kV/mA/ Time, kV/AEC option	
Image Receptors	2 Bucky + 1 Non-Bucky	

Stand-alone x-ray generators

System Model	AeroRAD-U32S	AeroRAD-U40S
Generator model	GXR-U32	GXR-U40
Power Rating	32kW	40kW
Line Nominal, Phase	100-240VAC, Single phase	
Line Voltage Range	±10% (Frequency : 50/60Hz)	
kV Range	40~125kV(optional 150kV), 1kV step	
mA Range	10 to 400mA	10 to 500mA
Timer Range	0.001 to 10 sec, 38 steps	
mAs Range	0.1 to 500mAs	
Max. Power Output	400mA@80kV / 320mA@100kV / 250mA@125kV Optional 200mA@150kV	500mA@80kV / 400mA@100kV / 320mA@125kV Optional 250mA@150kV
Power Requirement	900VA	
Rotor Supply	Low Speed (Optional LSS Brake)	
Reproducibility	Coefficient of Variation: kV < 0.005, Time < 0.005, mAs < 0.01	
Accuracy	kV < ±(1%+1kV), mA < ±(3%+1mA), Time < ±(1%+0.5ms), mAs < ±(3%+0.1mAs)	
Linearity	Coefficient of Linearity < 0.01 : CL = (X1-X2)/(X1+X2), where X is mR/mAs	
Anatomical Programs	Programmable 1280 programs with Software	
Technique Selection	4 point display (kV, mA, Time, mAs) : kV/mAs, kV/mA/Time, kV/AEC option	
Image Receptors	2 Bucky + 1 Non-Bucky	

Options

- AEC interface including ion-chamber
- Pedestal console stand
- Patient holder – Compression belt
- Patient handgrips (Tabletop, Wall stand – Chest, Overhead)
- Table Bucky Auto Tracking
- Cassette holders (Lateral, External wall stand)
- DAP meter with display
- DC power supply for line powered x-ray generator in case of insufficient line power
- DC brake for low speed starter of x-ray generator

X-ray Tube

System Model	AeroRAD-32S, 40S, C32S, C40S, U32S, U40S	
Tube Model / Maker	E7239X / Toshiba	E7242X / Toshiba
Focal Spot Size	1.0 / 2.0mm	0.6 / 1.5mm
Rating (0.1s)	22.5 / 47kW	18 / 50kW
Max. Anode HU	140kHU (100kJ)	200kHU (142kJ)
Max. kV	125kV	125kV

System Model	AeroRAD-32S(150kV), 40S(150kV), 52S	AeroRAD-68S
Tube Model / Maker	E7884X / Toshiba	E7252X / Toshiba
Focal Spot Size	0.6 / 1.2mm	0.6 / 1.2mm
Rating (0.1s)	22 / 54kW	27 / 75kW
Max. Anode HU	300kHU (210kJ)	300kHU (210kJ)
Max. kV	150kV	150kV

System Model	AeroRAD-82S	
Tube Model / Maker	E7255X / Toshiba	E7254X / Toshiba
Focal Spot Size	0.6 / 1.2mm	0.6 / 1.2mm
Rating (0.1s)	40 / 102kW	40 / 102kW
Max. Anode HU	300kHU (210kJ)	400kHU (285kJ)
Max. kV	150kV	150kV

Collimator

Model / Maker	MCR / DRGEM	R108F / RALCO
Control	Manual with 30sec. lamp timer	
Field Shape	Rectangular	
Max. Field Size	More than 43 x 43cm (17x17inch) at 100cm SID	
Max. kVp shield	150kV	150kV (Optional 125kV)
Luminosity	Over 160LUX at 100cm SID (Typ. 200LUX)	Over 160LUX at 100cm SID (Typ. 250LUX)
Standard	Rotating flange with fixing knob	Tape measure, Rotating flange with detent
Option	Tape measure on external surface	Line laser, Near port shutters

Floor-Ceiling Mounted

Model	TS-FC6
Tube Rotation Angle	±135°
Tube stroke	Longitudinal : 2,500mm Lateral : 220mm Vertical : 1,330mm (430~1,760mm from floor to focus)
Lock(Brake)	EM Lock, Switch on/off
Balance	Counter Weight
Column Rotation	90° step, Foot Lock
Options	Line laser, Column rotation by electrical release

Floor Mounted

Model	TS-FM6
Tube Rotation Angle	±135°
Tube stroke	Longitudinal : 2,200mm Lateral : 220mm Vertical : 1,330mm (440~1,770mm from floor to focus)
Lock(Brake)	EM Lock, Switch on/off
Balance	Counter Weight
Column Rotation	90° step, Foot Lock
Options	Line laser, Column rotation by electrical release

Ceiling suspended

Model	TS-CSA
Tube Rotation Angle	Horizontal axis: ±180° (LCD display) Vertical axis : ±180° (mechanical detents at every 90°)
Movement range with 3x4 m rails (Maximum 6x5 m rails optional)	Longitudinal : 3,280 mm Transverse : 2,200 mm Vertical : 1,600 mm (1,500 mm Optional)
Lock (Brake)	EM Lock, Switch on / off
Balance	Spring
Operation	Manual or Vertical Motorized Optional vertical synchronization with Wall stand and Table for motorized stand
Indication / Control	7 inch Touch Screen LCD with control buttons

Wall Bucky Stand

Model	WBS
Cassette stroke	Vertical 1,390mm (420~1,810mm from floor to Bucky center)
Bucky Type	Spring oscillating
Grid	Focal distance 40~72inch, 103 lpi, ratio 10:1
Lock(Brake)	EM Lock, Switch on/off
Balance	Counter Weight

* APPLIED PART, Optional Rotating tray

4-way Patient table

Model	PBT-4	
Movement	Tabletop	Longitudinal : 1,000(±500)mm Transverse(Lateral) : 250(±125)mm
	Bucky	Longitudinal : 350mm with standard tray / 310mm with rotating tray
Tabletop		Inherent Filtration : Less than 1.2mmAl at 100kV Max. Patient Weight : 300kg (660lbs) Size : 2,200(W) x 750(D) x 70(H) mm
Bucky Type		Spring oscillating
Grid		Focal distance 34~44inch, 103 lpi, ratio 10:1
Lock(Brake)		EM Lock, beam sensor on/off
Center indication		Buzzer sound and LED

* APPLIED PART, Optional Rotating tray

Elevating Patient table

Model	PBT-6	
Movement	Tabletop	Longitudinal : 1,000(±500)mm Transverse(Lateral) : 250(±125)mm
	Vertical	Travel : 285(565~850)mm, Speed : 17mm/sec Operating : Motorized movement by Foot Switch DC-motor (Linear Actuator)
	Bucky	Longitudinal : 350mm with standard tray / 310mm with rotating tray
Tabletop		Inherent Filtration : Less than 1.2mmAl at 100kV Max. Patient Weight : 300kg(660lbs) Size : 2,200(W) x 810(D) x 45(H) mm
Bucky Type		Spring oscillating
Grid		Focal distance 34~44inch, 103 lpi, ratio 10:1
Lock(Brake)		EM Lock, Foot Switch on/off
Center indication		Transverse center, height center
Side Cover		2-story telescopic Cover
Distance from table top to Detector / Cassette in the table		approx. 88 mm

* APPLIED PART, Optional Rotating tray

★ Specifications are subject to change without prior notice.



Manufactured by

DRGEM Corporation

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