

MECODIR WIRELESS DIGITAL RADIOGRAPHY SYSTEM





Easy Workflow & Reliability

Giving Shape to Ideas

High Image Quality

Scintillator Direct-Contact Technology

We succeeded in creating a new technology whereby a Csl scintillator is made to contact directly over a TFT* sensor panel without any protective layer in between them. This technology has made it possible to guide the light emitted from the scintillator to the photodiode more efficiently and with less noise.

Schematic cross secton of scintilator and TFT-panel. Scintillator X-ray Needle crystal of Csl Photodiode Photodiode Photodiode Photodiode Photodiode *TFT.-ThinFillmTransistor **FlexDR C30

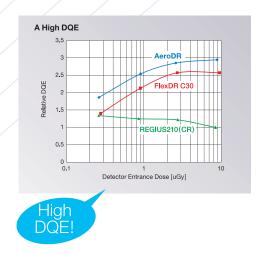
Original

High Image Quality

The optimal combination of the Aero DR detector using a Konica Minolta manufactured Csl scintillator with our newly developed low noise readout ICs delivers high DQE.*

At the same time, Aero DR delivers a wider dynamic range for DR which is comparable to CR. This means that in a radiograph of shoulder joints, for example, the Aero DR extended dynamic range permits visualizing the skin line accurately even when the radiographic conditions change along the way.

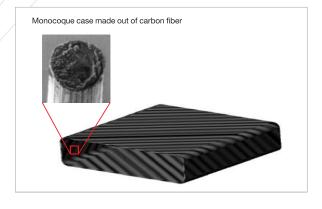
*DQE Detective Quantum Efficiency



Light Weight & Durable

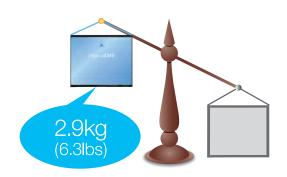
Durable Monocoque Structured Cassette

We adopted the "monocoque case" to ensure reliable operation even under substantial shock or load. Since the battery is incorporated in the cassette, the Aero DR has no notch for battery replacement which is known to reduce the structural integrity of the case. Because of this, the Aero DR cassette case is light weight and high in strength. The load bearing performance of the Aero DR wireless FPD cassette is the same as that of our CR cassette.



World's Lightest Weight Wireless FPD

The Aero DR Detector is the lightest FPD in the world weighing as little as 2.9 kg (6.3 lbs) and supports wireless networking which transmits captured images to the console. The Aero DR Detector is also available in a 17×17 " size and weighs a mere 7.92 lbs. Technologists can easily perform non bucky exams such as table top or cross table projections.



Easy Workflow & Reliability

Universal Solution for Existing X-ray Room

The Aero DR detector is the same size as an ISO 4090 compliant film cassette and will therefore fit any existing standard size wall-stand or table bucky tray.



Roaming FPD Solution

Aero DR can be used anywhere with "the Shared FPD Solution." As soon as Aero DR is registered to any X-ray room it is immediately ready to use.





Quick Preview and Smart GUI

After exposure, a preview image quickly appears on the display on the new CS-7 console in less than two seconds. The CS-7 has a user-friendly graphical user interface (GUI) adding new and powerful proprietary functions. The GUI design can be modified to meet customer preferences and flexibility needs.

New Energy-saving, Rapidly Rechargeable, Long-Life Battery In a Light, Durable Case

Aero DR provides enough energy to acquire over 10 images by the capacitor being recharged for only three minutes. A lithium ion capacitor, the world's newest technology, was chosen for its power saving advantage and because it has a charge and discharge cycle life that is longer than that of a lithium ion battery. It won't need to be replaced during the expected life cycle of the detector and, the rigid structure of the case is strong yet so simple it significantly reduces the weight of the cassette.

Battery Life Cycle	5 – 7 years
Charging Time Empty to Full	30 minutes with battery charger
Operating Time	5.5 hrs for 200 images

Aero DR Wireless Digital Radiography System Specifications*

Aero DR system 14x17 inch/17x17 inch detector

	14 x 17 inch	17 x 17 inch
Туре	Portable flat panel detector based on amorphous silicon (a-Si)	
Scintillator	Csl (Cesium lodide)	Csl (Cesium lodide)
Weight	2.9kg (6.38 lbs.)	3.6kg (7.92 lbs.)
Pixel size	175µm	175µm
Image Field	1,994 x 2,430 (4.8 million pixels)	2,430 x 2,434 (5.9 million pixels)
Power/Communications Tether	Possible	Possible
WLAN Standard	WLAN standard IEEE 802.11a	WLAN standard IEEE 802.11a
Dynamic Range	4 digits	4 digits
Dimensions (W x D x H)	15.1 x 18.1 x .6 inches	18.1 x 18.1 x .6 inches
Charging Time Empty to Full	30 minutes with battery charger	30 minutes with battery charger
Operating Time	5.5 hours/200 images	4.8 hours/173 images
	Under conditions that the interval between studies is five minutes and three images are captured in each study	
Battery Life Cycle	5 – 7 years	5 – 7 years

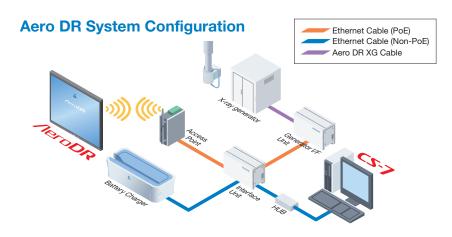
Aero DR system console CS-7

User Interface	Touch screen interface	Touch screen interface
DR Imaging Functions	HIS/RIS patient data access via DICOM Modality Worklist, advanced image processing, image review, image transmission	

^{*}Specifications are subject to change without notice. Aero DR is not intended for Mammography

Aero DR Control Station CS-7

Image Processing	Automatic Gradation Processing (G Processing); Frequency Processing (F Processing); Equalization Processing (E Processing); Hybrid Processing (H Processing); Hybrid Smooth Processing (HS Processing)	
Image Output	Maximum: Host: Up to 4 channels; Printer: Up to 2 channels	
DICOM Support	Basic Grayscale Print Management (SCU); Storage (SCU); Modality Worklist Management; Modality Performed Procedure Step; Grayscale Standard Display Function (print output)	
CR/DR Connections	Aero DR: Up to 4 simultaneous active detectors REGIUS Cassette Reader: Up to 15 units	
Main Options	Hardware Options: Bar-code Reader for REGIUS Cassette Registration; In-room Sub Monitor	
	Software Options: DICOM MWM/MPPS/DETACHED, FTP; DICOM Storage Output; DICOM Print; X-ray Generation Connection; Media Storage; Text Annotation; Automatic Body Part Recognition; Automatic Processing Parameter Study	







Introducing New 17 x 17" Size

- Wireless 17 x 17" a-Si/Csl Flat Panel Detector delivers new workflow benefits to patient care
- Super light weight for easy handling and positioning
- Large 17 x 17" image area may reduce the need to re-expose due to missed anatomy
- Premium Csl scintillator contributes to high DQE performance and excellent image quality
- Wired operation in the bucky, wireless operation everywhere else.

Konica Minolta's Commitment to Customer Satisfaction

At Konica Minolta, your complete satisfaction is our number one goal. From pre-installation through the lifetime of your investment, our professional staff provides the technical expertise you need. Project Management, Applications Training, and Field Services are different teams of Konica Minolta professionals that work together to maintain your continued satisfaction over the lifetime of your investment.

Protect your DR equipment investment and ensure your operational excellence by choosing the right Aero DR Customer Satisfaction Agreement that meets your department needs. Talk with your Konica Minolta Representative to find the right match and coverage for your facility and budget.

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