



AERO DR FLAT PANEL

AeroDR is the easiest way to achieve digital workflow. Preserve your investment and maintain economic value in existing radiography rooms with the AeroDR detector that fits existing equipment. Gain the clinical confidence you need for patient care decisions with the fast, high-quality and reliable AeroDR!

AeroDR builds on the foundation of high image quality that Konica Minolta is renowned for. The flat panel detector incorporates Konica Minolta's Cesium Iodide (CsI) scintillator that boasts ultra-high detector quantum efficiency (DQE) for high-quality images and dose efficiency. By combining the CsI panel and Konica Minolta's image processing technology from its top-rated REGIUS systems, the AeroDR assures end users of consistent and reliable high quality imaging.

The lightweight, wireless AeroDR 14"x17" panel weighs only 6.3 lbs. and incorporates a unique battery design for extended life and short charge cycles. AeroDR provides either a Universal Fit solution for converting existing analog rooms to digital suites, or a full room radiography solution when combined with a new x-ray purchase. With a detector design that fits existing wall stands and bucky trays without modifications, AeroDR helps a facility maximize its investment in existing X-ray imaging equipment by delivering a truly universal fit digital imaging solution.

Simple Innovation - a cornerstone of Konica Minolta's product development - continues with the AeroDR imaging console. Workflow improvements include an in-room sub console which delivers the ability to control imaging parameters patient side, allowing more time for the technologist to focus on the patient. The AeroDR imaging console also controls Konica Minolta CR devices allowing Konica Minolta customers to enjoy the same look and feel for their CR and DR front ends.

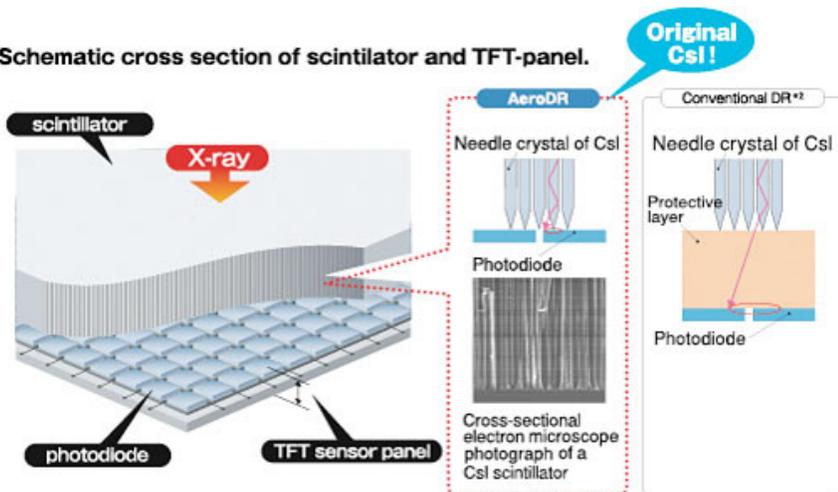
HIGH IMAGE QUALITY SCINTILLATOR DIRECT-CONTACT TECHNOLOGY

The AeroDR boasts a new Thin Film Transistor DR panel that reduces scatter and enhances image quality. Konica Minolta succeeded in creating a new technology whereby a CsI 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 without causing the light to be dispersed at the interface with the TFT sensor.

WEIGHT:

- 14" X 17" - 6.3 lbs
- 17" X 17" - 7.9 lbs
- 10" X 12" - 3.7 lbs w/battery

● Schematic cross section of scintillator and TFT-panel.



*1 TFT ... Thin Film Transistor *2 FlexDR C30

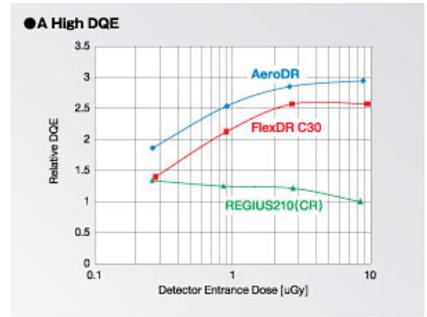




HIGH IMAGE QUALITY

The optimal combination of the AeroDR detector using a Konica Minolta CsI scintillator combined with the newly developed low noise readout ICs delivers a high DQE 3.

At the same time, we achieved the wider dynamic range of DR comparable to CR. This means that in a radiography of shoulder joints, for example, the AeroDR permits describing the skin line accurately even when the radiographic conditions change along the way.



DQE...Detective Quantum Efficiency

EASY WORKFLOW & RELIABILITY UNIVERSAL SOLUTION FOR THE EXISTING X-RAY ROOM

The AeroDR detector is the same as an ISO 4090 compliant film cassette in size so that it will fit any existing wall-stand or table bucky tray.



Easy Workflow

SHARED FPD SOLUTION

AeroDR can be used anywhere with "the Shared FPD Solution." As soon as AeroDR is registered to any X-ray room, AeroDR will be ready to use in the X-ray room immediately.

QUICK PREVIEW AND SMART GUI

After exposure, a preview image immediately appears on the display of the new CS-7 console in less than two seconds for a fast, efficient workflow. The CS-7 has a user-friendly graphic interface adding new and powerful proprietary functions. GUI design can be modified to customer preferences flexibly...

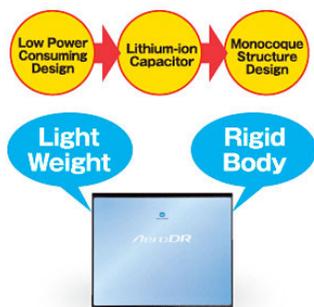
Screen Sequence



Shared FPD Solution

POWER-SAVING TECHNOLOGY

Patient safety is of primary importance. Konica Minolta has adopted new battery technology-with the lithium ion capacitor - which offers many advantages. The low power panel design also employs low power ICs and a power-saving control - so the AeroDR is ready when and where you need it for confident patient care decisions.





NEW BATTERY TECHNOLOGY ACHIEVES LIGHTWEIGHT YET RIGID BODY

The lithium ion capacitor has a charge and discharge cycle life that is tremendously longer than a lithium ion battery and does not markedly decrease in capacity even after it has continuously been used for many years. Therefore, it is possible to build environmentally friendly technology directly into the AeroDR. The structure of the cassette case has become so simple that it is possible to significantly reduce the weight of the cassette and increase the mechanical strength. Plus, the completely sealed cassette can be wiped clean and can withstand contact with liquids without damage - further helping your department achieve proper infection control protocols.



10 x 12, 14 x 17, 17 x 17

RELIABLE, RAPIDLY RECHARGEABLE AND LONG-LIFE BATTERY

The lithium ion capacitor, which charges quickly in a battery charger or through a tethered connection, has a long charge and discharge cycle life that does not need to be replaced during the expected life cycle of the detector. If the capacitor gets exhausted in an emergency, AeroDR can still produce over 10 images after being recharged for only three minutes.

- Battery Life Cycle - Same as the product life cycle
- Charging Time Empty to Full - 30 minutes with battery charger
- Operating Time - 5.5 hrs at 200 images

14 X 17

The panel that started it all... AeroDR 14 x 17 detector is ISO 4090 compliant so it fits existing wall stands or table buckys. The world's lightest panel provides reliable operation in a durable design.



THE 17"X17" FPD PROVIDES INCREASED IMAGE AREA

There is no need to rotate the panel from portrait to landscape and vice versa in the bucky tray depending on a patient's size when performing chest or abdominal X-ray procedures. The larger image area allows more anatomy to be imaged, thereby reducing positioning errors.

10"X12"

Right size your imaging solutions with the 10" x 12" AeroDR flat panel detector. Ideal for the NICU and extremity imaging in orthopedic applications, the 10 x 12 AeroDR conforms to international standard dimensions. This allows the detector to be used in incubator trays for examination of newborns, as well as in existing X-ray rooms without any modifications. Reliable and dose efficient, the new AeroDR panel helps improve patient care.





SPECIFICATIONS

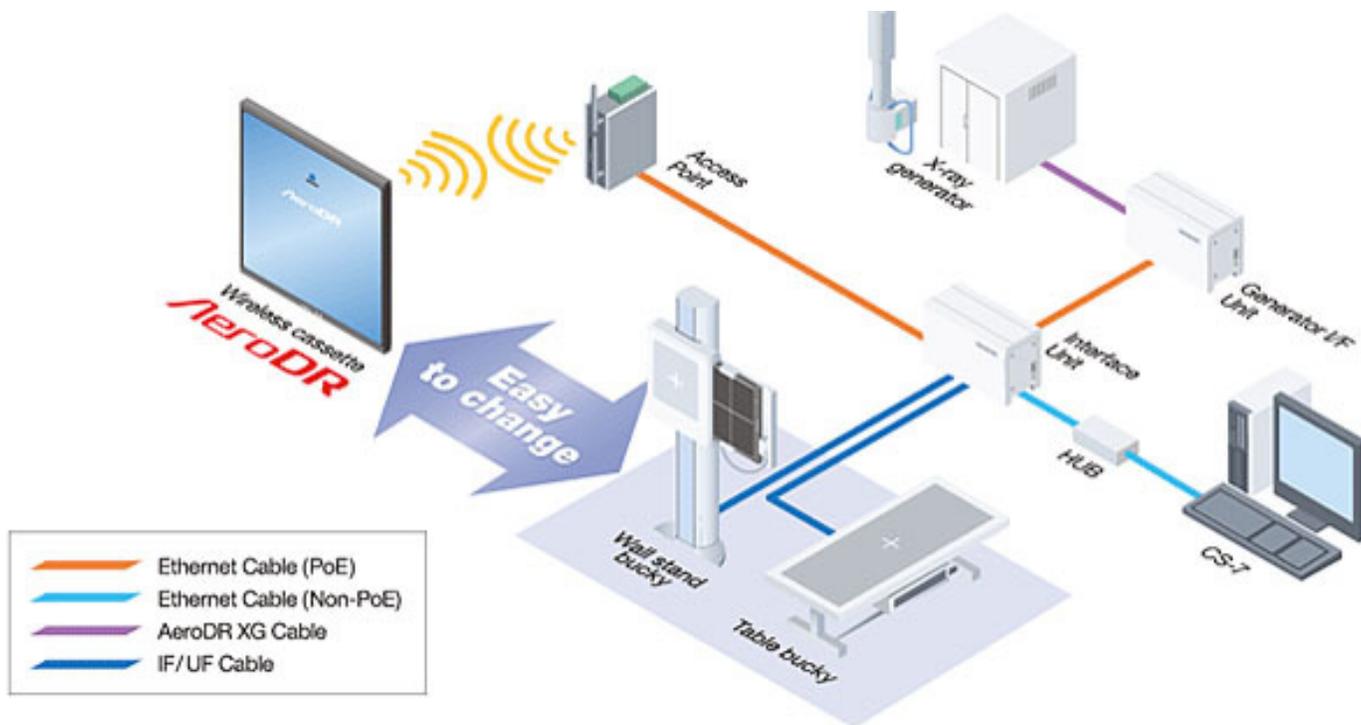
Detection method	Indirect conversion method
Scintillator	CsI (Cesium Iodide)
Dimensions (W x D x H)	14"x17" - 383.7 x 460.2 x 15.9 mm 17"x17" - 459.8 x 460.2 x 15.9 mm 10"x12" - 281.8 x 333 x 15.9 mm
Weight	14"x17" - 2.9 kg 17"x17" - 3.6 kg 10"x12" - 1.7 kg
Pixel size	175µm
Image area size	14"x17" - 348.95 x 425.25 mm (1,994 x 2,430 pixels) 17"x17" - 424.9 x 424.9 mm (2,428 x 2,428 pixels) 10"x12" - 245.7 x 296.8 mm
AD conversion	16 bit (65,536 gradients)
Communication	Dedicated wired ethernet connection / Wireless LAN (IEEE802.11a compliant)
WLAN encryption	Wireless encryption method : AES / Authentication method : WPA2-PSK
Cycle time	14"x17" - Approx. 9.2 sec with a dedicated wired connection and 13.3 sec with a wireless LAN connection. 17"x17" - Approx. 9.9 sec with a dedicated wired connection and 15.5 sec with a wireless LAN connection. 10"x12" - Approx 7 sec with a dedicated wired connection and 9 sec (wireless with a wireless LAN connection connection)
Dynamic range	4 digits
Battery charging time empty to full	Within 30 minutes (when using the AeroDR battery charger) Within 60 minutes (when using the dedicated wired cable)
Battery duration in standby status	Approx. 16 hours
Number of exposable images	14"x17" - 200 images / 5.5 hours: 17"x17" - 173 images / 4.8 hours: 10" x 12" – 146 images / 4.0 hours * Under conditions that the interval between studies is five minutes and three images are captured in each study, assuming 20 seconds for each exposure to position a patient.
Battery expected life time	Above the AeroDR detector product life time
Recommended storage and usage environment conditions	When operating : 10 to 30°C / 35 to 80% RH(ensure no water condensation) When not operating : -10 to 40°C / 20 to 90% RH(ensure no water condensation) In storage : -20 to 60°C* / 20 to 90% RH(ensure no water condensation) * However, performance warranty period when storing at 60°C is 6 months after packing.

- The described performance may change depending on the environment and frequency of use. (This is not a guarantee of performance.)
- The performance of battery is all performance after fully charged.
- Specifications are subject to change without prior notice.





AERODR SYSTEM CONFIGURATION



- AeroDR is not intended for Mammography.
- Specifications are subject to change without notice.

