WIRELESS DIGITAL RADIOGRAPHY SYSTEM

AeroDR

- Light-weight (including battery):
  14"x17": 23.8kg / 17"x17": 36kg
- Energy Conservation Design: 16hr Stand-by time

Distributed by:

KONICA MINOLTA, INC.
1 South Street, Suite 200
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This is the cassette DR you've dreamed of...

To achieve the high quality and good operability, Konica Minolta’s answer is AeroDR.

High Image Quality

Easy Workflow & Reliability

Light-weight & Durable
**Scintillator Direct-Contact Technology**

We 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.

**High Image Quality at Low X-ray Dose Comparing to CR**

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

![Graph showing High DQE](image-url)
**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.

**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.

**Integrated Control Station CS-7**
CS-7 can control AeroDR detectors and connect to DR readers.

**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. The CS-7 has a user-friendly graphic interface adding new and powerful proprietary functions. GUI design can be modified to customer preferences flexibly, succeeding the conventional console design.

**Power-saving Technology**
Patient safety is of primary importance, therefore the lithium ion capacitor, the world newest technology, was adopted as a battery technology which has many advantages despite of demanding a lower power consuming panel design, which has been overcome by employing low power ICs and a power-saving control.

**New Battery Technology Achieves Light-weight yet Rigid Body**
The lithium ion capacitor has a charge and discharge cycle life that is tremendously longer than that of the 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 be built in to AeroDR and also friendly to the environment. In this case, 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 of the cassette.

**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 emergency, AeroDR gets over 10 images by the capacitor being recharged for only three minutes.
Light-weight & Durable

Light-weight Wireless FPD (14"x17" and 17"x17")

The AeroDR Detector is light-weight FPD weighing as little as 2.9kg (14"x17" panel)/3.6kg (17"x17" panel) and supports wireless networking which transmits captured images to the console. Technicians can easily perform non-bucky exams such as table top or cross table projections.

Durable Monoque Structured Cassette

We adopted the "Monoque case" to ensure trouble-free operation even under substantial shock or load. Since the battery is incorporated in the cassette (it need not be replaced), it is unnecessary to provide the case with a notch for battery replacement which reduces the rigidity of the case. Because of this, the cassette case that is appreciably light in weight has sufficient rigidity. Thanks in part to the buffer effect of the buffer battery, the load bearing performance of the cassette is the same as that of our CR cassette.

Sealed and Protected Scintillator

In order to prevent the scintillator from being deformed by local concentration of external force, a double-glass structure in which the CsI scintillator glass plate and the TFT panel glass plate are overlapped and sealed together is adopted for AeroDR. The double-glass structure not only enhances the load-bearing performance but also prevents the scintillator edge from being deformed by a mechanical shock (e.g., fall or striking of the cassette) and the TFT sensor panel glass plate from being broken.