

WIRELESS DIGITAL RADIOGRAPHY SYSTEM

NeroDR2 14175



/leroDR2 1417S



KONICA MINOLTA, INC.

Distributed by:







AeroDR SYSTEM 2 was designed with input from customers worldwide to meet their most important needs.





Light weight and Robust

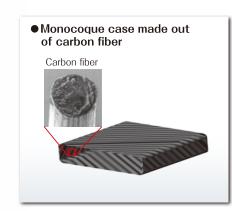


One of the lightest FPD in its class

AeroDR 2 1417S is one of the lightest FPD in its class weighing 2.5kg(5.5lb). Konica Minolta developed the ideal combination of components, grip materials and cover design to deliver a durable panel that weighs only 2.5kg (5.5lb). AeroDR 2 1417S

the ideal wireless cassette type DR, is easy to carry and for patients to hold.





Durable Monocoque Structured Cassette

■ Use of CFRP

(carbon fiber reinforced plastic)

The CFRP is a light and strong composite material hardened with weaved plastic resin.

■ What is monocoque?

A monocoque structure refers to a method of construction used to support structural loads by use of and object's exterior.



Durability Against Loading

We consider varied operation scenes of DR panels.

- 1-point load test: Cleared endurance test at 150kg (330.7lb) ϕ 40mm (1.6 inch).
- Surface load (uniform load): Cleared endurance test on the entire surface of the 300kg (661.4lb) on image field.



Water resistance IPX6*3

Cassette-type DRs may be exposed to body fluids, disinfectants and other liquids accidently. Konica Minolta considered that such accidents happen and achieved the water resistance grade IPX6. The structure of AeroDR 2 1417S does not allow liquids to penetrate or damage the main components.

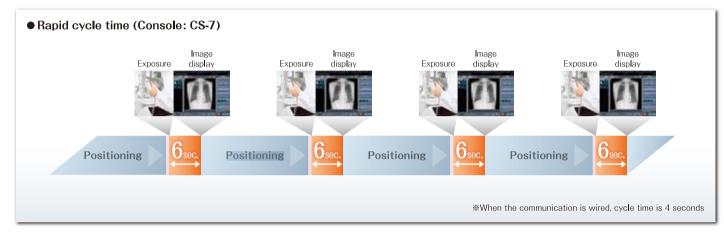
*3 The product may fail to maintain its waterproof performance (equivalent to IPX6) if it has been dropped. The waterproof performance of this product does not guarantee that product damage or failure will not occur.



Powerful and Reliable Workflow

Rapid cycle time

AeroDR 2 1417S introduces rapid cycle time, reducing the time needed for image processing to six seconds to improve comfort while increasing productivity.





High-performance power cell

Fast charge

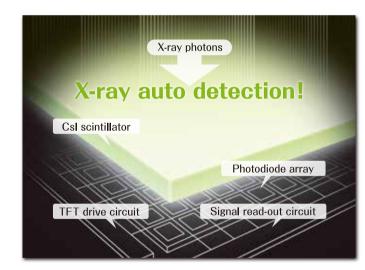
Lithium ion capacitor charges from 0 to 100% in 13 minutes.

■ Safety

As lithium ion capacitor is hard to generate heat, it is safe to take examas while the panel is faced to a patient body.

■ Long battery life

Expected battery life is the same as one of AeroDR main body. It is unnecessary to replace the battery.

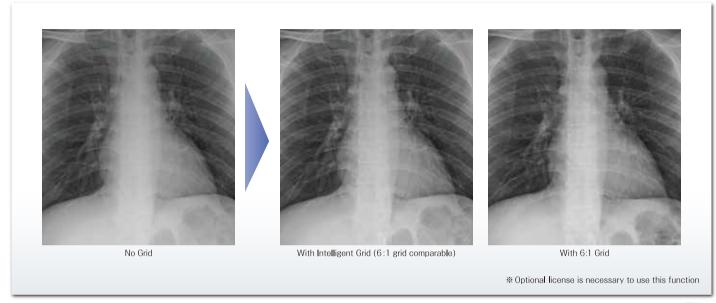


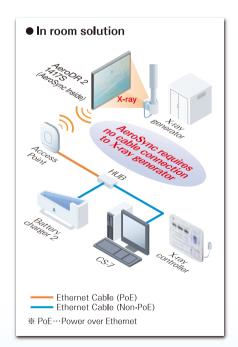
Reliable AeroSync

AeroSync is the automatic exposure detection from KonicaMinolta that allows exposures without connection to X-ray generator. Konica Minolta evaluated operation cases which we can improve DR operation by AeroSync. We are going to expand wireless cassette type DR market by AeroSync not only to HP market also Clinic market, home care, disaster medicine.

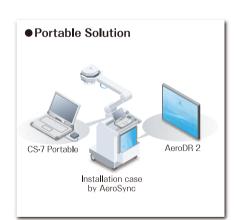
Intelligent Grid

This is the image processing to improve contrast which is affected by scattered radiation without a grid. This function provides easy workflow, the operator need not carry the grid to perform a exam. Three types of parameters are available from comparable grid ratios; 3:1/6:1/8:1.





As AeroDR 2 1417S has AeroSync function, existing analogue or CR system can be upgraded to cassette type DR system.



AeroDR 2 1417S portable retrofit system can upgrade existing analogue X-ray unit to a portable DR system. Key components are panel, console PC and a access point *4. AeroDR portable retrofit system serves versatility from bed side exposure till ICU, ER, OR and other exposure environment.



Konica Minolta can offer a mobile DR system with AeroDR 2 1417S for home care, disaster medicine. As system components such as panel, console PC and a access point*4 and Battery charging unit can be packed in Konica Minolta special designed carrying bag, users can carry the system easily.



AeroDR System 2 Specifications

| Wireless Digital radiogra | aphy System AeroDR 2 1417S |
|---|--|
| Product name (model name) | AeroDR P-52 (AeroDR 2 1417S) |
| Detection method | Indirect conversion method |
| Scintillator | Csl (Cesium Iodide) |
| External dimensions (W×D×H) | 383.7×460.2×15.9mm (15.0×17.9×0.6 inch) |
| Weight | 2.5kg (5.5lb) |
| Pixel size | 175µm |
| Image area size | 348.95 × 425.25 mm (13.6 × 16.6 inch) (1,994 × 2430 pixels) |
| AD conversion | 16 bit (65,536 gradients) |
| Usable grid frequency | 40 lp/cm, 34 lp/cm |
| Durability *5 | Point load: 150kg@\$\phi\$40mm Face load: 300kg@ effective image area overall |
| Water resistance *6 | IPX6 |
| Communication | Dedicated wired ethernet connection/ Wireless LAN (IEEE802.11a/IEEE802.11n compliant) |
| W-LAN encryption | Wireless encryption method: AES / Authentification method: WPA2-PSK |
| Cycle time *7 | Approx. 4 seconds with dedicated wired connection Approx. 6 seconds with wireless LAN connection |
| Operating time * 7,8 | 150 images/ 4.1 hours |
| Battery charging time empty to full | Within 13 minutes (When using the AeroDR Battery Charger2, AeroDR Interface Cable2) |
| Battery duration in standby status *9 | 10 hours |
| Battery expected life time | Same as the AeroDR panel life time |
| Recommended storage and usage environment condition | When operating: (Temperature) 10 to 30°C (30 to 86°F) (Humidity) 35 to 80% RH (ensure no water condensation) (Atmospheric pressure) 700 to 1060 hPa |
| | When not operating: (Temperature) -10 to 40°C (14 to 104°F) (Humidity) 20 to 90% RH (ensure no water condensation) (Atmospheric pressure) 700 to 1060 hPa |
| | In storage / transport : (Temperature) -20 to 50°C (-4 to 122°F) (Humidity) 20 to 90% RH (ensure no water condensation) (Atmospheric pressure) 700 to 1060 hPa |

About tested values listed above, methods to measure are followed by the standard of Konica Minolta.

*5 Dead loading does not give affection to processed image or panel. Robustness against loading of AeroDR 2 1417S is not to provide any guarantees not to be damaged, not to be broken. *6 When a shock such as drop or hit on the floor is loaded on AeroDR 2 1417S, water resistance performance (Value as IPX6) may be lost. And the water resistance performance of AeroDR 2 1417S is not to provide any guarantees about perfect water resistance, not to be damaged, not to be broken. *7 Specification may vary depending on system configuration or environment. The specification described above is under the condition that AeroDR SYSTEM 2 is connected to X-ray generator. *8 The specification is based on the condition that 3 exposures within one study and interval time between studies is 5 minutes. It takes 20 seconds for positioning. Under the condition that AeroDR SYSTEM 2 has linkage with X-ray generator. When connected to CS-7 image processing workstation. *9 The specification described above is based on full battery charge and may vary depending on system configuration or environment.

* However, performance warranty period when storing at 50°C is 6 months after packing.

AeroDR Battery charger 2

Power AC $100/110/115/120/200/220/230/240 \text{ V} \pm 10\%$ Single Phase 50/60 HzWeight

External dimensions ($W \times D \times H$) $560 \times 250 \times 153$ mm ($22.0 \times 9.8 \times 6.0$ inch)



AeroDR Battery charging Unit

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|---|---|
| Power requirements | AC 100 / 110 / 115 / 120 / 200 / 220 / 230 / 240 V \pm 10% Single phase 50 / 60Hz (When dedicated AC adaptor is used) |
| Power consumption | Approx. 168 VA (100 to 240V) |
| Weight | 0.38kg (0.8lb) |
| External dimensions ($W \times D \times H$) | $90 \times 125 \times 30$ mm ($3.5 \times 4.9 \times 1.2$ inch) |
| AeroDR BC Unit AC Adapter | Product Name : AC Adapter (Model Number. Cincon Electronics Co.,Ltd. TR60M48) |
| Specifications | Dimensions : $132.0 \times 58.0 \times 30.5$ mm ($5.2 \times 2.3 \times 1.2$ inch) |
| | INPUT : AC 100-240 V 1.5-0.7A 47-63Hz |
| | OUTPUT : DC 48 V 1.25 A |

AeroDR I/F cable2

| Cable length | 1m |
|-----------------------------|---|
| External dimensions (W×D×H) | $79 \times 42 \times 14 \text{mm} (31 \times 16 \times 0.5 \text{ inch})$ |

Control Station CS-7

| Image Processing | Auto-gradation processing, Frequency processing (F processing), Equalization processing(E processing), Hybrid processing(HF processing - HE processing), Hybrid smoothing processing(HS processing) Grid removal processing, Automatic exposure field recognition processing, Tube and Gauze image enhancement (option), Intelligent Grid (option) |
|------------------|--|
| Image Output | Host: max 4 ch / Printer: max 2 ch |
| DICOM support | DICOM Storage SCU, DICOM basic Grayscale Print Management SCU, DICOM Modality Worklist Management SCU, DICOM Modality Performed Procedure Step SCU |
| Readable devices | AeroDR detector REGIUS MODEL 170, REGIUS MODEL 190, REGIUS MODEL 210, REGIUS MODEL 110 REGIUS MODEL 110HQ*10, REGIUS SIGMA, REGIUS SIGMA2 |

*10 It is not FDA cleared in the United States.

