

# AeroDR PREMIUM



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



*Light-weight and Robust*

*Powerful and Reliable Workflow*

*Added Flexibility*

*High Image Quality*

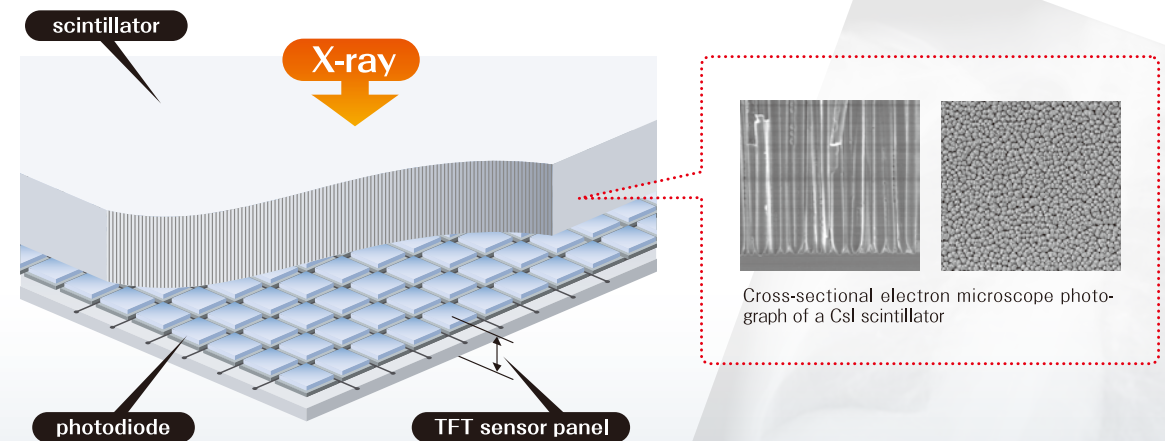


## High Image Quality

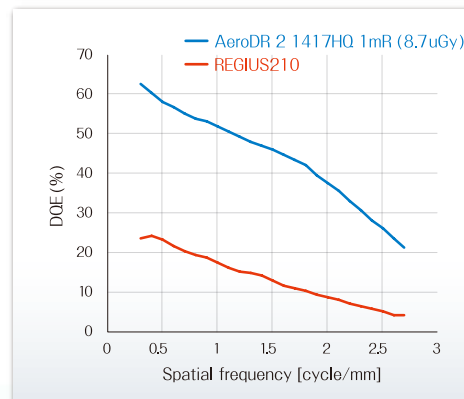
### Scintillator technology

AeroDR offers a "needle crystal" CsI scintillator developed and manufactured by KonicaMinolta. The "needle crystal" CsI scintillator is a proprietary method to apply CsI developed over research and manufacturing experience to deliver high DQE.

● Schematic diagram of scintillator and TFT-panel.



### High image quality at low x-ray dose comparing CR



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

\* Detective Quantum Efficiency





# Light-weight and Robust

## Lightest detector in the world\*1



AeroDR 2 1417HQ

AeroDR 2 1417HQ is the lightest 14×17 inch size wireless cassette-type DR in the world. Konica Minolta developed the ideal combination of components, grip materials and cover design to deliver a durable panel that weighs only 2.6kg (5.7lb). AeroDR 2 1417HQ is the ideal wireless cassette-type DR that is easy for you to carry and for patients to hold.

\*1 In wireless cassette-type DRs as of August 1, 2014.



Panel grip sheets

## Water resistance IPX6\*2



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

\*2 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.



## Robust monocoque structure

New monocoque covers have been designed to provide a robust and light weight enclosure for safe and comfortable operation.



## Load and bend resistance

Konica Minolta developed AeroDR 2 1417HQ with actual user operation scenarios in mind. AeroDR 2 1417HQ provide the robustness of the current AeroDR series; as well, it has been cleared for the loading test assuming bedside exposure or exposure to the patient on a stretcher.

### •Durable against loading

AeroDR 2 1417HQ achieved twice the robustness of the current AeroDR series and has especially enhanced durability against bending.

Surface load  
300kg (661.4lb)

Point load  $\phi$ 40mm  
150kg (330.7lb)

Above internal tests have been cleared

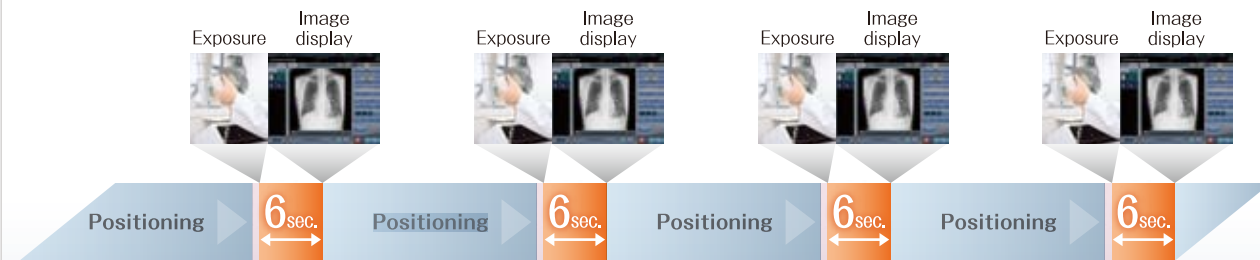


# Powerful and Reliable Workflow

## Rapid cycle time

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

### ● Rapid cycle time (Console: CS-7)



※ When the communication is wired, cycle time is 4 seconds.

## High-performance power cell

AeroDR 2 1417HQ is powered by a lithium ion capacitor for high performance.

### ■ Long-lasting

8.2 hours of operating time to expose 300 images\*

### ■ Fast charge

Lithium ion capacitor charges from 0 to 100% in 30 minutes.

### ■ 20 hours of stand-by time

Lithium ion capacitor is able to keep AeroDR 2 1417HQ on stand-by mode for up to 20 hours.

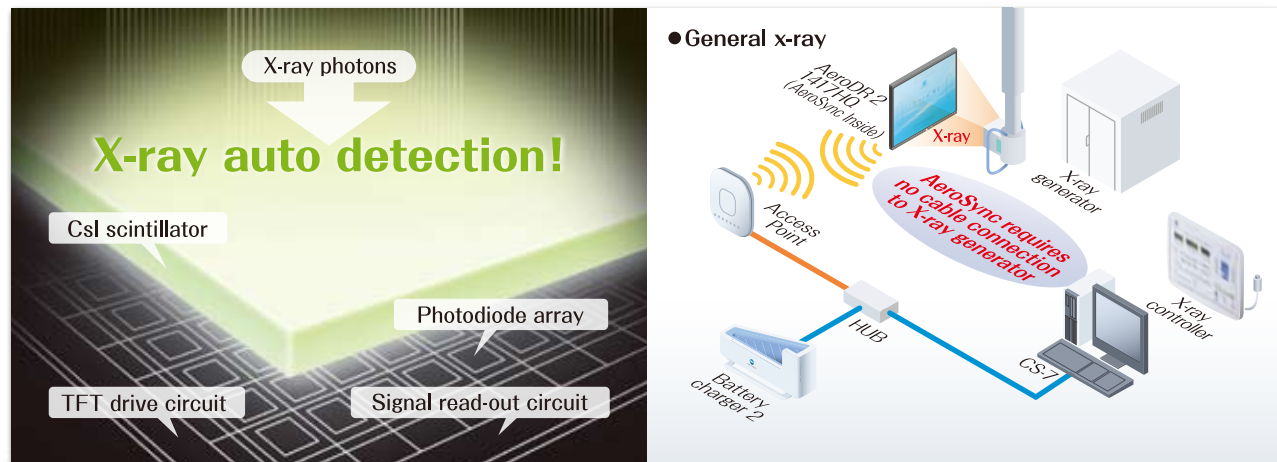




# Added Flexibility

## AeroSync

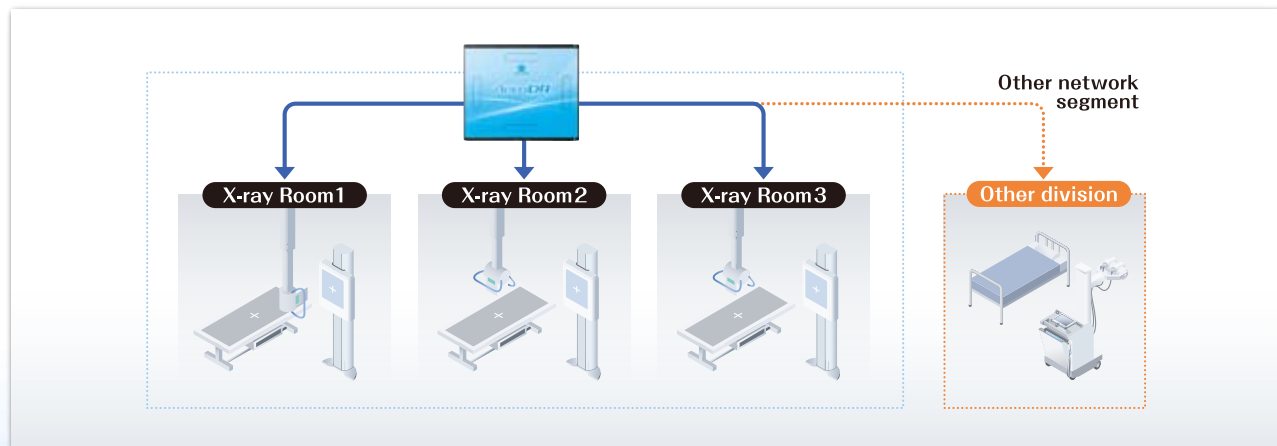
AeroSync is the automatic exposure detection from Konica Minolta that allows wireless exposures without a connection to the generator. AeroSync provides the opportunity to make exposures at bed-side, the operating room and the emergency room. Konica Minolta evaluated operational cases throughout the world-wide market and has created new technologies in AeroDR 2 1417HQ for more reliable operation and to achieve further precision of AeroSync.



Regarding available x-ray units to operate with AeroSync, please contact Konica Minolta local representatives.

## New roaming function

- The AeroDR 2 1417HQ panel can be carried to any other CS-7 console without concerns over network conditions.
- Necessary panels can be used where needed.





# AeroDR System 2 Specifications

## Wireless Digital radiography System AeroDR 2 1417HQ

Product name (model name)	AeroDR 2 1417HQ (AeroDR P-51)
Detection method	Indirect conversion method
Scintillator	CsI (Cesium Iodide)
External dimensions (W×D×H)	383.7×460.2×15.9mm (15.1×18.1×0.6 inch)
Weight	2.6kg (5.7lb)
Pixel size	175 μm
Image area size	348.95×425.25mm (1,994×2430 pixels)
AD conversion	16 bit (65,536 gradients)
Usable grid frequency	40lp/cm, 34lp/cm
Durability*3	Point load : 150kg@φ40mm Face load : 300kg@ effective image area overall
Water resistance*4	IPX6
Communication	Dedicated wired Ethernet connection / Wireless LAN (IEEE802.11a/b/g/n compliant)
W-LAN encryption	Wireless encryption method: AES / Authentication method: WPA2-PSK
Cycle time*5	Approx. 4 seconds with dedicated wired connection Approx. 6 seconds with wireless LAN connection
Operating time*6	300images/8.2hours
Battery charging time empty to full	Within 30 minutes (When using the AeroDR Battery Charger) Within 30 minutes (When using the AeroDR Battery Charger2) Within 30 minutes (When using the dedicated wired cable)
Battery duration in standby status*7	Approx. 20 hours
Battery expected lifetime	Above the AeroDR Detector Service life
Recommended storage and usage environment condition	When operating: (Temperature) 10 to 30°C (Humidity) 35 to 80% RH (Water condensation must be avoided) (Atmospheric pressure) 700 to 1060 hPa  When not operating: (Temperature) -10 to 40°C (Humidity) 20 to 90% RH (Water condensation must be avoided) (Atmospheric pressure) 700 to 1060 hPa  In storage / transport: (Temperature) -20 to 50°C (Humidity) 20 to 90% RH (Water condensation must be avoided) (Atmospheric pressure) 700 to 1060 hPa  * However, performance warranty period when storing at 50°C is 6 months after packing.

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

\*3 Dead loading not to give affection to processed image or panel. Robustness against loading of AeroDR 2 1417HQ is not to provide any guarantees not to be damaged, not to be broken. \*4 When a shock such as drop or hit on the floor is loaded on AeroDR 2 1417HQ, water resistance performance (Value as IPX6) may be lost. And the water resistance performance of AeroDR 2 1417HQ is not to provide any guarantees about perfect water resistance, not to be damaged, not to be broken. \*5 Specification may vary depending on system configuration or environment. The specification described above is under the condition that AeroDR SYSTEM2 is connected to X-ray generator. \*6 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 SYSTEM2 has linkage with X-ray generator. When connected to the CS-7 image processing workstation. \*7 The specification described above is based on full battery charge. The specification described above may vary depending on system configuration or environment.

## AeroDR Battery Charger2

Power requirements	AC 100 / 110 / 115 / 120 / 200 / 220 / 230 / 240V ± 10%, single phase 50 / 60Hz
Power consumption	Charging : 180VA (100-240V) / Standby : 30VA (100-240V)
External dimensions (W×D×H)	474.2×200×206.7mm (18.7×7.9×8.1 inch)
Weight	6kg (13.2lb)

## AeroDR Interface Unit2

Amount of connectable AeroDR Detectors	Wired connection : Up to 2 Wireless connection : Up to 4 AeroDR Access Point is necessary when operating wireless.
Power requirements	AC 100 / 110 / 115 / 120 / 200 / 220 / 230 / 240V ± 10%, Single phase 50 / 60Hz
Power consumption	With the AeroDR Detector connected : Approx. 80VA (100-240 V) Without the AeroDR Detector connected : Approx. 33VA (100-240 V)
External dimensions (W×D×H)	460×180×285mm (18.1×7.1×11.2 inch)
Weight	12.5kg (27.6lb)

## AeroDR Generator Interface Unit2

Power requirements	When the AC adapter is used : Supplied from the dedicated AC adapter. When the AeroDR Interface Unit is used : Supplied from the AeroDR Interface Unit via the Ethernet cable.
Power supply when using the dedicated AC adapter	AC 100 / 110 / 115 / 120 / 200 / 220 / 230/240V ± 10%, Single phase 50 / 60Hz
Power consumption when using the dedicated AC adapter	72VA (100-240V)
External dimensions (W×D×H)	210×150×50mm (8.3×5.9×2.0 inch)
Weight	0.9kg (2.0 lb)

## 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	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	AeroDR : Up to 4 simultaneous active detectors REGIUS 110, 110HQ*, 190, 210 : Up to 15 units REGIUS Sigma : One unit * It is not available to connect in USA.
Main Options	Hardware options Software options
	Bar-code Reader for REGIUS Cassette Registration, In-room Sub Monitor DICOM MWM / MPPS / DETACHED, FTP, DICOM Storage Output, DICOM Print, Media Storage and others. Please contact your Konica Minolta sales representative for more details.