



KONICA MINOLTA

AeroDR HD

✧ Wireless Digital Radiography System



Giving Shape to Ideas

AeroDR HD

AeroDR HD

Konica Minolta has developed the AeroDR HD: our most sophisticated detector with the highest resolution and sensitivity enabling

the highest image quality and lower radiation doses. From now on every image will be clearer than ever, allowing for even better analyses.

WHEN DETAILS MATTER: 100 μ m PIXEL SIZE

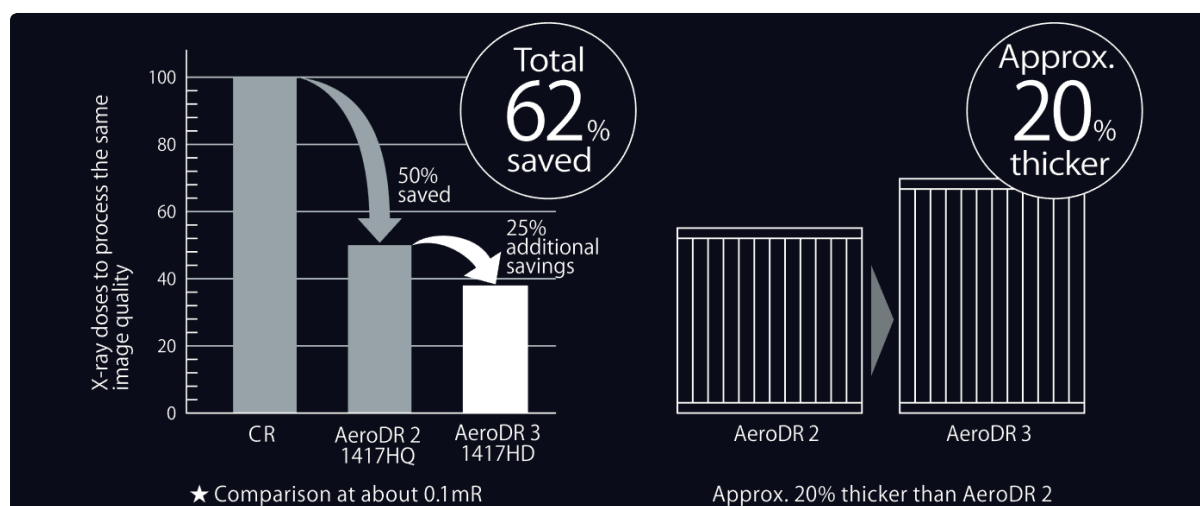
- ▀ Display micro structures
- ▀ Better visibility of bone trabecular
- ▀ Edge of the bone is more clear
- ▀ No “pixel shape” when zooming in
- ▀ Higher DQE and Lower Radiation doses
- ▀ Lightweight and Robust structure
- ▀ Fast and Reliable Workflow
- ▀ Updated AeroSync for longer automatic exposure detection



HIGHER DQE & LOWER DOSE

Konica Minolta introduces the latest technological advances with the AeroDR HD “High Sensitivity TFT (Thin Film Transistor) detector”. The thicker CsI scintillator, a high sensitivity photo diode on the TFT panel and new ROIC (Read out IC), which can

reduce the electrical noise level by 50% or more, enables optimized detection values. Now we can provide patients and AeroDR users with higher Detector Quantum Efficiency (DQE) and lower radiation doses.



Thicker CsI Scintillator

The scintillator material is evenly distributed from the bottom to the top of the detector and it is more than 20% thicker than the AeroDR Premium panel. This helps providing the high DQE.

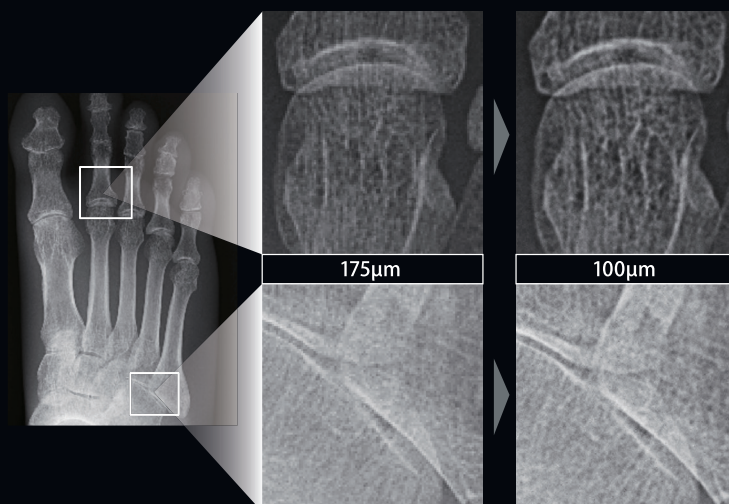
100 micron pixel size

For Radiography professionals who demand the highest level of confidence, the AeroDR HD has an astonishing pixel size of only 100µm!

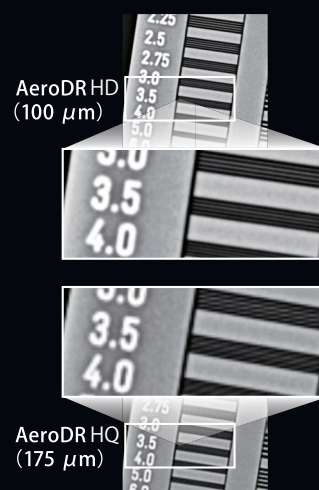
With 3488 x 4256 pixel count – up to 4 times more than standard resolution detectors, the AeroDR HD allows you to enlarge microstructures to conduct precise analyses required for extremities, pediatrics and other specialties where image details and dose efficiency are vital to diagnosis.

AeroDR HD sample image

The pixels are 100 microns across, and this small size helps ensure clear images.



- 100 micron pixels eliminate the effect of pixel shape on the image, even under high power magnification in the viewer.
- 100 micron pixels make it possible to display the micro structure within the image.



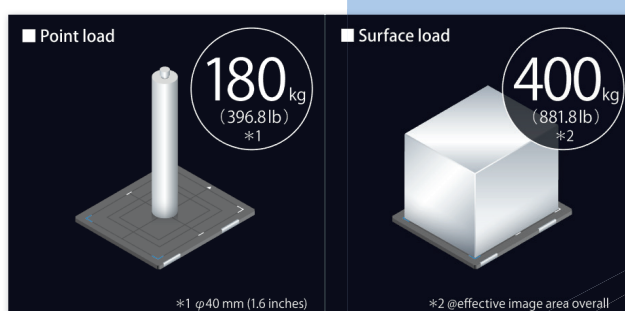
LIGHTWEIGHT AND ROBUST STRUCTURE

New Grip Design

Weighing just 2.6 kg (including powercell), the panel is light in weight, and a new grip design makes it even easier and safer to handle in your daily routine.

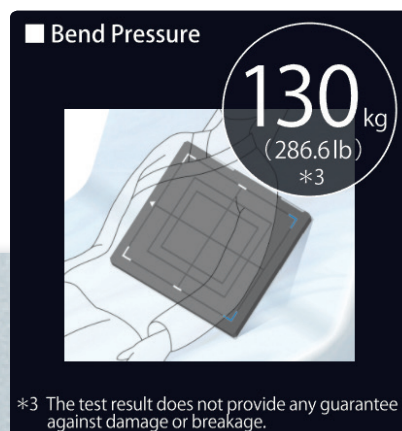
Load resistance

The world's highest load resistance of 400kg and a 130kg bending resistance; to withstand demanding conditions during bedside exams.

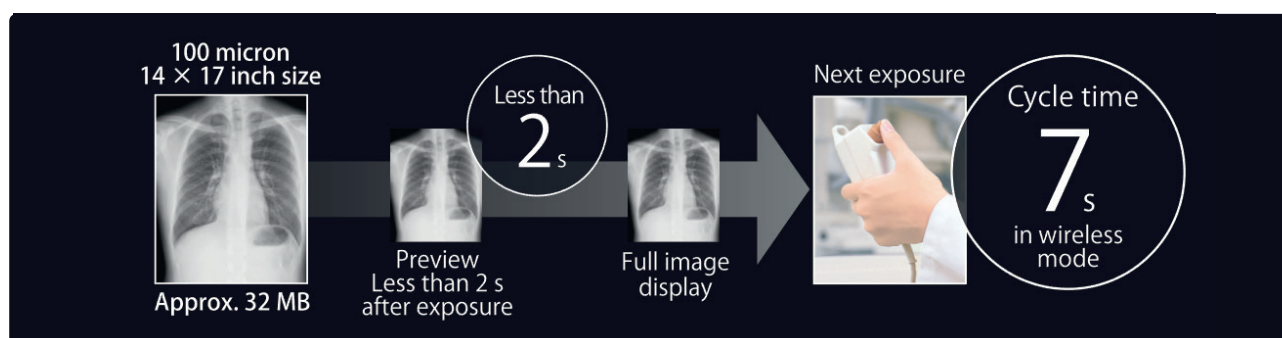


Waterproof

The AeroDR HD is waterproof (IPX6) even after the detector was dropped from a height of 1.0 m. This makes the detector very suitable for more extreme environments like trauma departments, ICU and disaster relief operations where it is more likely to be exposed to liquids and body fluids.



FAST AND RELIABLE WORKFLOW



Rapid Cycle time

The AeroDR HD can handle large image data and provide short cycle times even though the image is taken by 100 micron pixels.

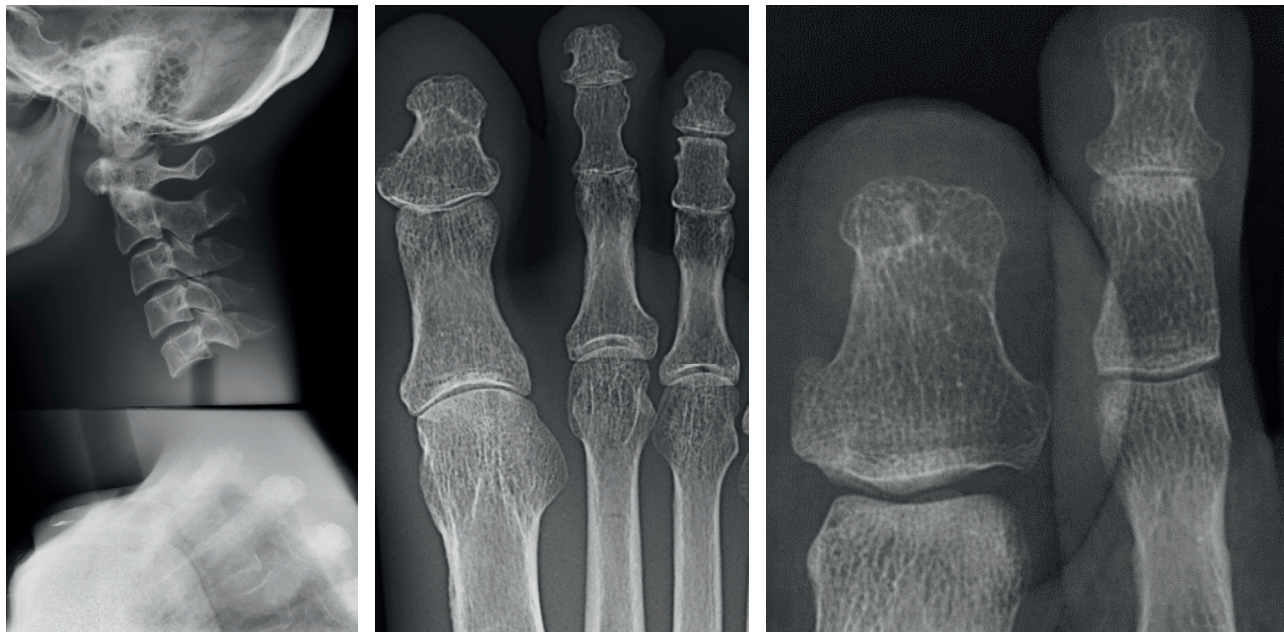
High Performance Capacitor

The AeroDR HD is powered by a Lithium-ion capacitor for high performance and safety. It charges from 0 to 100% within 30 minutes.



Updated Image Processing

Konica Minolta's new image processing enhances images in the low density part.



Sample images (C Spine lateral, Foot)

Updated AeroSync Technology

If the X-ray generator has low power or patient body parts are thick, the updated AeroSync technology of the AeroDR HD supports a wider range of techniques than before. This includes:

- Lumbar spine (for thicker body parts)
- MSK (for Orthopedic)
- Veterinary, horses (for large body parts)

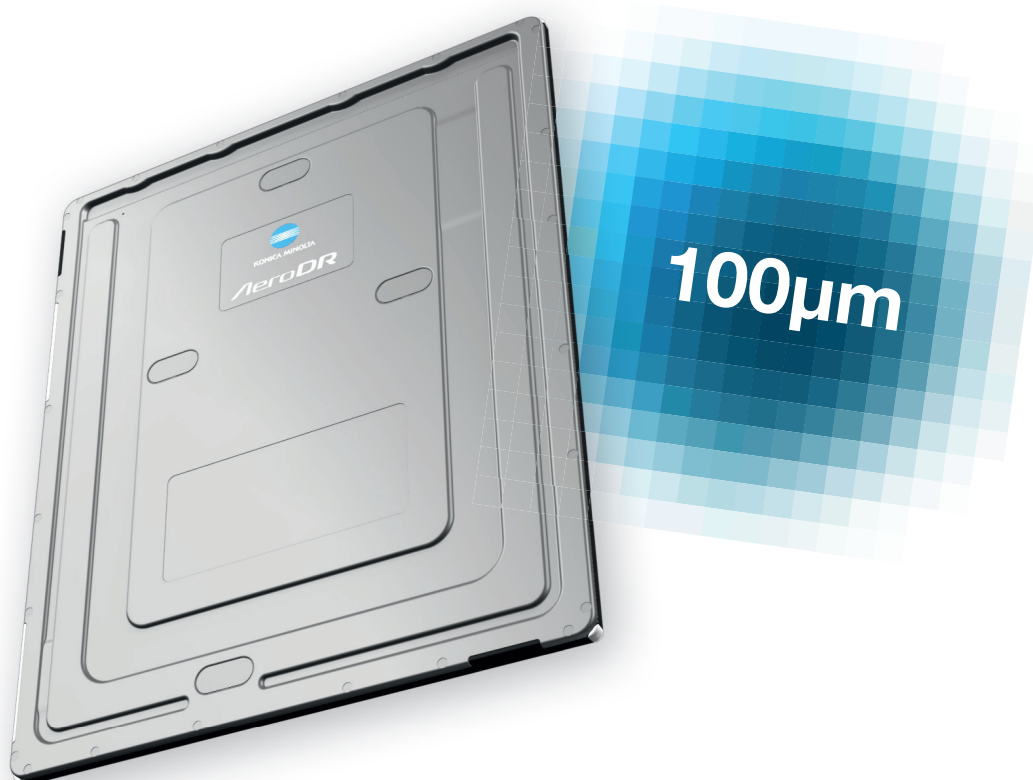
Exposures with AeroSync on AeroDR HD can go up to 4 seconds.



AeroDR HD System Specifications

Product name (model name)	AeroDR HD (14''x17'')
Detection method	Indirect conversion method
Scintillator	CsI (Cesium Iodide)
External dimensions (WxDxH)	384 x 460 x 15 mm (15.1 x 18.1 x 0.6 inches)
Weight	2.6 kg (5.7lb)
Pixel size	100 μ m*
Image area size	348.8 x 425.6 mm (13.7 x 16.8 inches)
A/D conversion	16 bit (65.536 gradients)
Usable grid frequency	60lp/cm, 40lp/cm, 34lp/cm
Communication	Dedicated wired Ethernet connection / Wireless LAN (IEEE802.11a/IEEE802.11n compliant)
Encryption	Wireless encryption method: AES / Authentication method: WPA2-PSK
Auto Exposure Detection (AED)	Available (AeroSync)
Durability	• Point load 180 kg @ $\varnothing$ 40 mm • Face load 400 kg @ effective image area overall • Water resistance IPX6 including power cell
Cycle time	• 100 microns Approx. 6 s with dedicated wired connection Approx. 7 s with wireless LAN connection
Battery Performance	(SRM wireless)
(Exposure linkage with X-ray unit)	Up to 251 exposures and 6.9 hours(100 μ) Up to 309 exposures and 8.6 hours(200 μ)

* Default pixel size is 100 μ m, but can be set to 200 μ m to save storage space



AERODR HD.
WHEN DETAILS
MATTER.



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