

# The family of **high-performance** wireless digital detectors.



SPACE AGE  
**CARBON SMC**  
CASING



**GLASSLESS**  
DESIGN



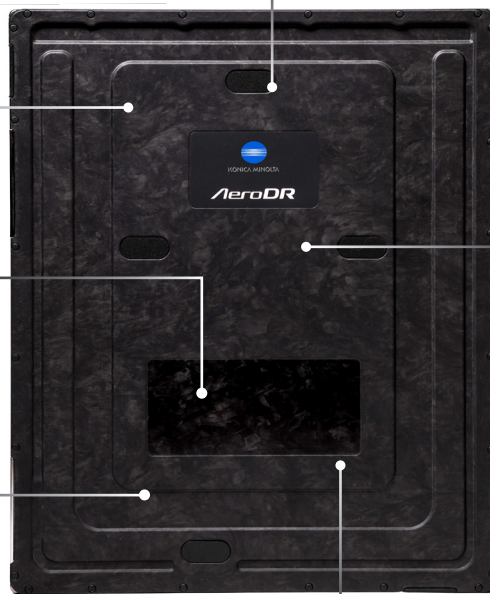
**STRONG  
& LIGHTWEIGHT**  
LESS THAN 4.2 LBS



**HIGH SENSITIVITY**  
**72+% DQE**  
(0mR, 1cyc/mm)



**7 YEAR**  
**POWER CELL**  
**WARRANTY**



**HIGH DEFINITION**  
AVAILABLE IN 100/200  $\mu$ m  
RESOLUTION

## Built Tough



**BEND RESISTANCE**  
Up to 286 lbs.



**BARIATRIC READY**  
Up to 54 CM Thickness Even  
in Portable X-ray



**WATERPROOF**  
IPX6 Compliant



**STRONGER**  
Holds up to 881 lbs.

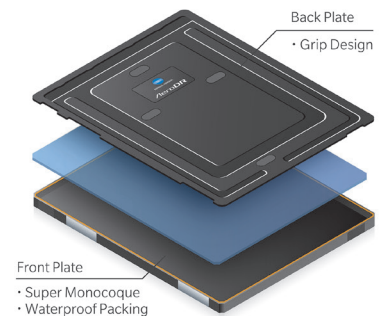


**EASIER TO HOLD**  
60% Less Grip  
Strength Needed

# The AeroDR<sup>®</sup> advantage.

Konica Minolta designs and manufactures the AeroDR line of flat panel detectors and image processing software for digital radiography that delivers solutions that provide clinical and economic value to meet your needs. The AeroDR Glassless Flat Panel Detectors are our lightest, strongest and most sensible solution to help you improve efficiency and reduce user fatigue without compromise.

The glass substrate was replaced by a thin film transistor (TFT)



AeroDR Glassless Flat Panel Detectors use a thin film instead of a glass substrate to achieve lighter weight. Removing the glass reduces the distance between the scintillator and the TFT to increase sensitivity. The electronics are optimized to reduce electrical noise. Additionally, the AeroDR Glassless Product Line is offered in a High-Definition (HD) option, which offers enhanced detail at 100 $\mu$ . The High Dynamic Range option that provides a 200 $\mu$  resolution for a wider range of tone variations to visualize tissue.

The unique Carbon SMC monocoque structure with ergonomic design and built-in Lithium-Ion capacitor provides the lightweight and resiliency needed for high-volume applications. The monocoque structure can hold up to 881 lbs. of distributed weight, meets MIL-STD 810G drop resistance and is sealed to meet IPX56 certification for dust and liquid intrusion resistance. The built-in Lithium-Ion capacitor eliminates the need to replace batteries and ensures structural integrity. Each capacitor provides a long usage time, charge takes less than 30-minutes and has a 7-year warranty.

AeroDR Flat Panel Detectors are designed for REALISM, an advanced image processing algorithm that delivers a new level of clarity and detail for superior visualization within the soft tissue and bony structures. REALISM independently processes bone and soft tissue data to enhance image sharpness and contrast to reveal subtle aspects of the image. REALISM improves workflow efficiency by simultaneously enabling the visualization of soft tissue and bone with a reduced number of window-level adjustments.



Standard Processing

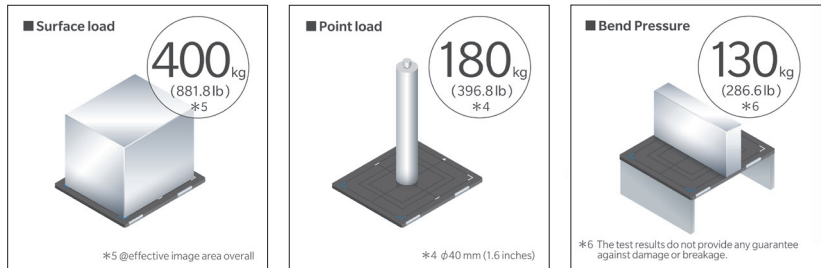


REALISM Image Processing

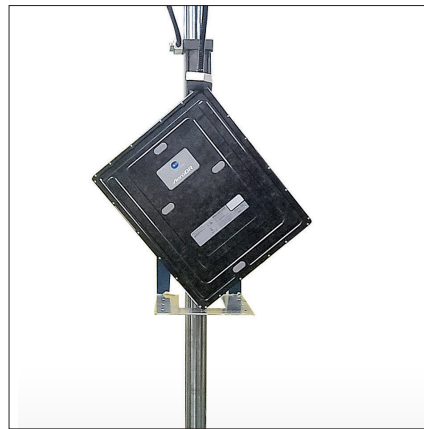
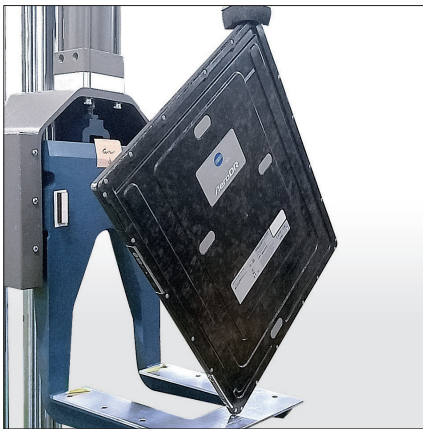
## Ergonomic design

- Easier to hold
- Reduces operator stress

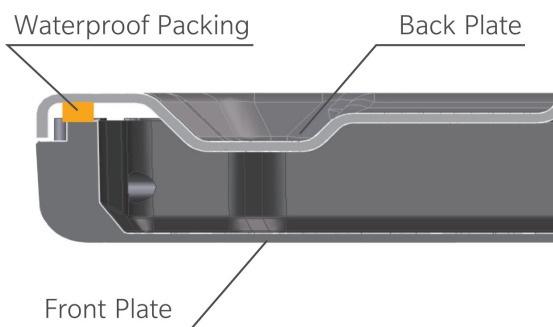
## Reliable load-bearing performance



## Meets MIL-STD-810G drop test: Total of 26 drops from a 47.24" height



## Compliant with IP56 waterproof/dustproof standard



\*IPX5X available in select models. If dropped, the product may fail to maintain its waterproof performance.  
The waterproof performance of this product does not guarantee that product damage or failure will not occur.

## Choose the solution that is right for you.

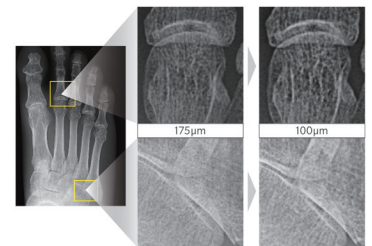
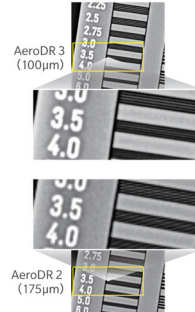
### **AeroDR** | **GL HD-2**

#### **Glassless Enhanced Resolution 100 $\mu$ m/200 $\mu$ m Imaging (Selectable)**

- High-definition and dynamic range imaging
- Selectable 100/200 $\mu$ m Resolution
- Long power cell life up to 8.6 hours on full charge (2 LiC)
- Storage for up to 100 images
- 14" x 17" panel weighs 4.2 lbs/1.9 kg super lightweight including two capacitors
- Lighter than the CR cassette (14"x17" size: 2.0 kg)
- IPX56 dust and liquid resistance (with integrated power supply)
- 4.0 sec AED with AeroSync<sup>®</sup>



High-resolution imaging allows greater detail for small structures



### **AeroDR** | **GL HD-1**

#### **Glassless Enhanced Resolution 100 $\mu$ m/200 $\mu$ m Imaging (Selectable)**

- High-definition and dynamic range imaging
- Selectable 100/200 $\mu$ m Resolution
- Long power cell life up to 4.3 hours on full charge (1 LiC)
- 14" x 17" panel weighs 3.96 lbs/1.8 kg super lightweight including the capacitor
- Lighter than the CR cassette
- IPX56 dust and liquid resistance (with integrated power supply)
- 4.0 sec AED with AeroSync<sup>®</sup>



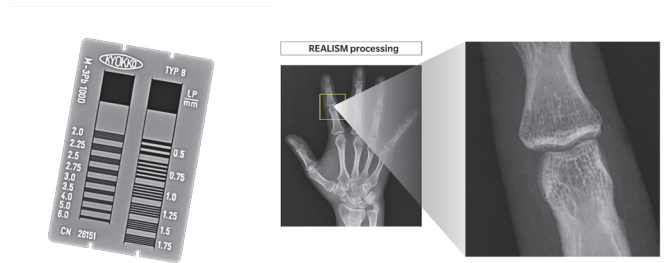
## AeroDR | GL-P

### Glassless Standard Resolution Imaging

- High-dynamic range imaging at 200 $\mu$ m resolution
- 14" x 17" panel weighs 3.96 lbs/1.8 kg super lightweight including the capacitor
- Long power cell life up to 4.3 hours on full charge (1 LiC)
- IPX56 dust and liquid resistance (with integrated power supply)
- 4.0 sec AED with AeroSync<sup>®</sup>



High dynamic range takes advantage of REALISM image processing to enhance tone variation to visualize soft tissue with minimal impact to resolution at normal viewing ratios.



## AeroDR | CARBON

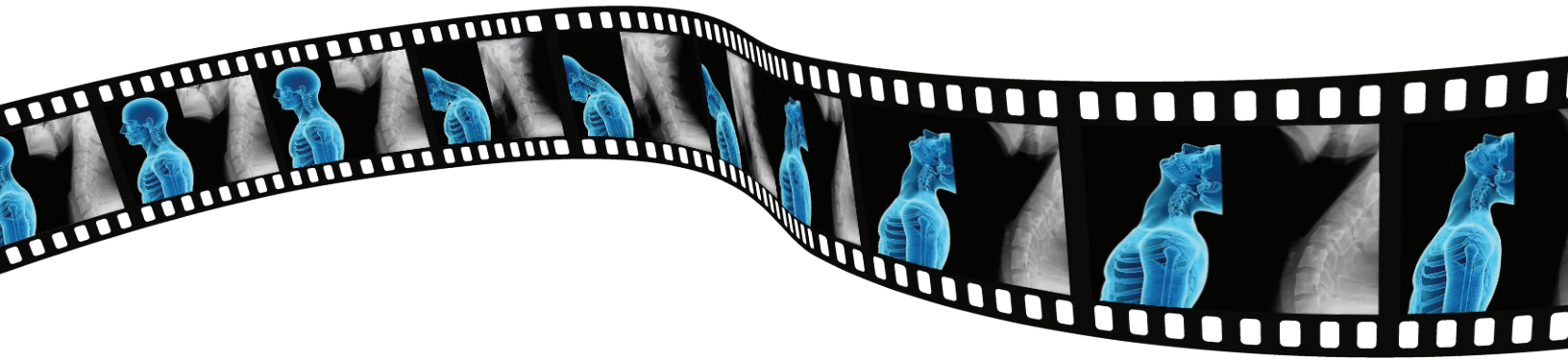
### Dynamic Digital Radiography (DDR) Detector

#### High Resolution 100 $\mu$ m Imaging with Dynamic Digital Radiography (DDR)

- Traditional design Detector (glass substrate)
- DDR Capable
- High-Definition Imaging
- Selectable Image Processing - 100 $\mu$ m/200 $\mu$ m
- Available in 14"x17" and 17"x17" sizes
- Up to 8.6 hours on full charge (2 LiC)
- Carbon SMC Monocoque structure design
- IPX6 dust and liquid resistance (with integrated power supply)
- 4.0 sec AED with AeroSync<sup>®</sup>



# Dynamic Digital Radiography (DDR).



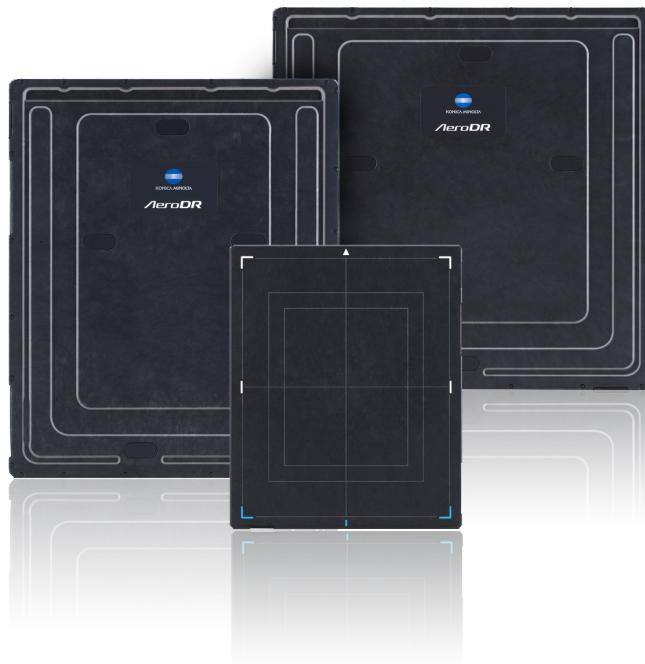
## Why Consider Dynamic Digital Radiography?

Dynamic Digital radiography (DDR) is an exciting new X-ray technology that enables low-dose dynamic acquisition and visualization with a conventional X-ray device. This reimbursed technology allows for standard radiography and full 17" x 17" imaging at 15 fps.

**DDR is the only imaging study that provides a view of anatomy in motion, with a large field of view and low radiation dose.**

Most advanced medical imaging technologies like CT and MRI provide superb spatial resolution but not movement. Ultrasound has a limited range, and fluoroscopy cannot be re-processed to highlight soft tissue. Images can be acquired with the patient in a natural upright position, which is impossible with CT or MR. The underlying DDR technology, and its application to several pulmonary and cardiothoracic indications, is well established. With DDR, you can visualize cardiac, diaphragm, and lung motion facilitating the ability to extract analytic information about lung volumes, lung parenchyma motion, pulmonary circulation, and ventilation in a conventional X-ray. Recently, it has been used for musculoskeletal imaging for many orthopedic, neuro-spine and sports medicine pathologies.

\*DDR is only available in select systems



## Product selection guide

Category	AeroDR® GL-P	AeroDR® GL HD-1	AeroDR® GL HD-2	AeroDR® CARBON
Image area	348.8×425.6mm / 3,488×4,256 Pixels	348.8×425.6mm / 3,488×4,256 Pixels	348.8×425.6mm / 3,488×4,256 Pixels	348.8×425.6mm / 3,488×4,256 Pixels
External dimensions	15.1"×18.11"×0.6"	15.1"×18.11"×0.6"	15.1"×18.11"×0.6"	15.1"×18.11"×0.6"
Weight	3.96 lbs/1.8 kg	3.96 lbs/1.8 kg	4.2 lbs./ 1.9 kg	5.7 lbs
Matrix size	1,744 × 2,128 (200μ)	3,488 × 4,256 (100μ) 1,744 × 2,128 (200μ)	3,488 × 4,256 (100μ) 1,744 × 2,128 (200μ)	3,488 × 4,256 (100μ) 1,744 × 2,128 (200μ)
Pixel size, μm	200μ	100μ/200μ	100μ/200μ	100μ/200μ
Image preview in seconds	~2 @ 200μ	~3 @ 100μ ~2 @ 200μ	~3 @ 100μ ~2 @ 200μ	~3 @ 100μ ~2 @ 200μ
Diagnostic view in seconds	4-7 sec – Pixel size and Generator connection dependent	4-7 sec – Pixel size and Generator connection dependent	4-7 sec – Pixel size and Generator connection dependent	4-7 sec – Pixel size and Generator connection dependent
Patient Weight / Distributed Entire detector surface	881.8 lbs	881.8 lbs	881.8 lbs	881.8 lbs
Drop Sensors	Yes – Accelerometers	Yes - Accelerometers	Yes - Accelerometers	Yes - Accelerometers
Certifications	IP56 and MIL-STD 810G	IP56 and MIL-STD 810G	IP56 and MIL-STD 810G	IPX6 and MIL-STD 810G
Power	Lithium-ion capacitor	Lithium-ion capacitor x1	Lithium-ion capacitor x2	Lithium-ion capacitor x2
Expected power between charges –S-SRM	200μ Up to 150 exposures @ 4.3 hrs	100μ Up to 116 exposures @ 2.5 hrs.* 200μ Up to 150 exposures @ 4.3 hrs	100μ Up to 251 exposures @ 6.9 hrs.* 200μ Up to 309 exposures @ 8.6 hrs	100μ Up to 251 exposures @ 6.9 hrs.* 200μ Up to 309 exposures @ 8.6 hrs
Expected power between charging AeroSync - AED	200μ Up to 137 exposures @ 3.3 hrs	100μ Up to 106 exposures @ 2.2 hrs.* 200μ Up to 137 exposures @ 3.3 hrs	100μ Up to 167 exposures @ 4.6 hrs. 200μ Up to 198 exposures @ 5.4 hrs	100μ Up to 167 exposures @ 4.6 hrs. 200μ Up to 198 exposures @ 5.4 hrs
Charge time	Up to 13 min	Up to 13 min	Up to 30 min	Up to 30 min
DQE @ 0 cycle/mm	72%	72%	72%	72%
DDR Capable	No	No	No	Yes
Max AED exposure	4.0 seconds	4.0 seconds	4.0 seconds	4.0 seconds

**Also available:** AeroDR Carbon 17" x 17", AeroDR HD 10" x 12"

\*Assuming that the AeroDR is connected to an X-ray, the interval between studies is 5 minutes, and three images are captured in each study and 20s for patient positioning.

**For more information about the AeroDR<sup>®</sup> Family of Flat Panel Detectors,  
please contact your Konica Minolta Sales Representative.**

