



# ЛегоDR 3 нD2

Giving Shape to Ideas



# IMPROVE PATIENT SATISFACTION IN X-RAY DIAGNOSTICS

## OPTIMIZING YOUR INVESTMENT BY STREAMLINING WORKFLOWS WITH TOTAL-INTEGRATED KONICA MINOLTA HEALTHCARE SOLUTIONS

Radiology has been widely adopted by most healthcare systems due to availability, cost-effectiveness, and well-developed technologies. However, more and more pressure, which is generated by the growing population, is on shoulders of clinical institutions globally, resulting in challenges to look for better, more affordable, and efficient solutions to improve patient satisfaction.

#### CHALLENGES OF HEALTHCARE SYSTEMS:

Over **30%** of **patient complaints** are from either **delay of service** or **communication issues** 





<sup>1</sup> European Society of Radiology. Patient complaints in radiology: 9-year experience at a European tertiary care center (2019) Resources deployment is getting critical for clinical institutions while more expensive healthcare service, more patients, less reimbursement per person, and less patient satisfaction come together.

Today, although having medical devices, which are note well-integrated from different suppliers, may slightly reduce your initial investment, that inevitably generates enormous bottlenecks of communication between devices and burdens of service and maintenance, holding back workflows, increasing patient complaints, and eventually consuming more energy, time, and money to operate your organizations.

Konica Minolta focuses on providing affordable integrated solutions to you that aims to serve everyone at anytime and in anywhere. Let us tackles challenges of workflows, so you can focus on making better diagnostic decisions, sooner.









#### FOREVER HYGIENE

The Carbon Sheet Molding Compound provides a constant antibacterial performance without sacrificing image quality and deteriorating overtime, effectively reducing probability of bacterial infection.

#### UNIQUE LITHIUM CAPACITOR

The lithium capacitor exclusively offered by Konica Minolta has at least 6-year lifetime without reducing performance, releasing your burdens from battery maintenance, replacement, and additional costs.

#### RAPID CYCLE TIME

The cycle time, which is Up to 2s in wired and 7s in wireless mode with 100µm high-definition image quality, saving time of workflows and empowering you to communicate with patients more thoroughly.

#### BE READY FOR DDR

**Dynamic Digital Radiography**, X-ray that moves, allows you to observe movement like never before.

**DDR**, which will be launched in 2022, delivers digital moving images of physiological cycles and clinically relevant information in a fast exam with low doses of radiation. AeroDR 3 HD2 is the only FPD that complies with DDR.



### HIGH IMAGE QUALITY, FOREVER HYGIENE

Konica Minolta introduces the latest technological advances with the AeroDR 3 High sensitivity TFT panel. The thicker Csi scintillator and new ROIC can reduce the electrical noise level. Now we can provide patients and Aero R users with high Detective Quantum Efficiency (DOE) and lesser doses with AeroDR 3 when compared with previous systern.



#### **Thicker Csl Scintillator**

The scintillator material is evenly distributed from the bottom to the top of the panel, it's more than 20% thicker than the AeroDR2 1417HQ panel. This helps provide the high DQE.



100μm pixels eliminate the effect of pixelation on the image, even under high power magnification in the viewer.
100μm pixels make it possible to display micro structures within the image.

# rox.

AeroDR 3 1417HD2

#### Antibacterial carbon enclosure that does not impact performance.\*2

AeroDR3 1417HD2/1717HD2 provides a permanent antibacterial performance that does not deteriorate over time by incorporating antimicrobial agents containing Ag in its enclosure materials. Since antibacterial performance is not lost due to scratches in daily use, it can be used with confidence due to the antibacterial properties required for preventing nosocomial infections.



\*2 The antibacterial effect is not effective to all of bacteria. Although antibacterial treatment can suppress propagation of bacteria, it does not eliminate bacteria completely or help complete prevention of infection. Bacteria may propagate when the surface has fatand-oil or dirt adhered on it.

#### An enclosure that is lightweight, rugged and safe.

Carbon SMC (Carbon Sheet Molding Compound) is used for the enclosure material for the first time as a medical device\*<sup>3</sup>. It is a material that is lightweight yet has excellent rigidity, and antibacterial agents can be kneaded into the material, achieving both high durability and safety required in the medical field.

#3 As of Mac 2021. An internal investigation





Lightweight
Durability

#### Лего**DR 3** нд2



AeroDR has evolved to meet the needs of healthcare workers.

# **ANYWHERE**

### WORKFLOW OPTIMIZATION

#### **CS-7 Integrated control station** CS-7 can control multiple AeroDR panels and CR readers as a integrated console station. (Please contact your Kenica Minoita sales representative



#### **Rapid Cycle Time**

The AeroDR SYSTEM 3 can handle large image data and provide short cycle times even though the image data is taken at 100µm pixels.

#### 100µm 14 × 17 inch size Next explosure Cycle time / s in wireless Preview mo-de less than 2 s after exposur Aperox, 32 MB

#### The pixel size is selectable between 100µm or 200µm.

AeroDR 3 users can select a pixel size of 100µm or 200µm before taking an X-ray. This allows users to control the image data size if they need to save storage space. After taking the X-ray, the CS-7 image-processing workstation has options to output images to save data space.





#### Aero Storage for bedside solution

AeroDR 3 is equipped with an "Aero Storage" function that allows you to exam with the panel alone. It can be stored up to 100 images, and it can switch from CR to DR easily at a bedside examination.

#### Intelligent Grid

Image processing that improves contrast which is affected by scattered radiation without a grid. This function provides easy workflow, and the operator need not carry it to perform an exam. Three types of parameters are available from comparable grid ratios;3:1/6:1/8:1/10:1/12:1.







#### Tube and gauze image enhancement

CS-7 can highlight tube and gauze images that are difficult to detect with normal images.

Optional license is necessary to use this function

With 200µm pixels and in wireless mode, the cycle time is 4 s.

# FOR EVERYONE

### **STRONG AND** LIGHTWEIGHT

#### Super Monocoque Housing Structure

Konica Minolta has developed a new detector design to provide easy handling and high durability.





#### **Excellent Grip Design**

The depression is on the backside panel surface, helping to prevent user fingers from being caught. This excellent design makes it easier and safer to handle in your daily routine.

#### Sustains IPX6 waterproof compliance even after the panel was dropped from height of 1.0m.\*\*

The AeroDR 3 panel has cleared the durability test for water resistance after dropping it from a height of 1m. The structure of the AeroDR 3 panel does not allow liquids to penetrate or damage the main components.

# The internal test condition is that the AeroOR 3 1417HD2 main body is dropped once onto a concrete floor that has a 2mm-thick sheet laid on it, after which the water resistance test is conducted. Depending upon the operating conditions and detector status, the IPX6 water resistance may be lost





AeroDR 3 panel has passed the US Department of Defense MIL-STD-810G drop strength test

plywood, 12 ridgelines, and 8 vertices. Test landscape











The AeroDR 3 panel has undergone a variety of internal tests based on some assumed extreme operating scenarios. \* The test results do not provide any guarantee against damage or breakage.

Enhanced waterproof performance.

The test consists of drops from a total of 26 places once each from the height of 122 cm (48 inches). The 26 places are 6 planes above

Konica Minolta assumed an operating scenario in which a 130 kg patient lies on the AeroDR 3 panel main body for a bedside exposure, and designed the detector such that it would not affect the processed image or suffer internal damage.



# WHY KONICA MINOLTA

Today's healthcare systems encounter various and complex challenges that haven't been expected: COVID-19, aging population, increasing healthcare expenditures with declining reimbursement, and supply chain issues, etc. At Konica Minolta, we are driven by redefining and creating values for healthcare providers that equips them to tackle those challenges, achieving diagnostic excellence.

With over 75 years of business history, we are a leading medical technology company in medical diagnostic imaging solutions that cover imaging equipment, ultrasound systems, and medical IT systems. Our advanced solutions cut through the complexities of your IT processes by automating and optimizing documentrelated processes to simplify workflows and make medical information accessible and compliant.

By providing comprehensive ICT services and solutions, we contribute to the realization of faster and more reliable diagnosis services and improved economic value through total cost of ownership, efficiencies, and increased productivity.

We will stay focused on end users and professional needs. **Together, we can make the world healthier.**