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*Smart Portability & Best Quality Image  
For Limitless Performance*

Exprimer



DRTECH



# Exprimer

Smart portability & best quality image  
for limitless performance

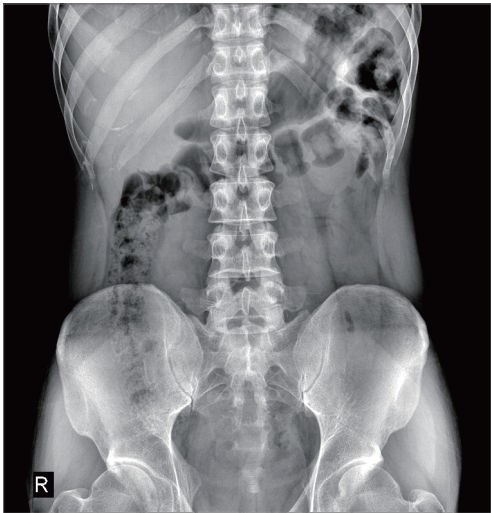
Exprimer, DRTECH's innovative digital x-ray solution combined advanced 'Information Technology' with the latest digital detector technology. With its versatility, Exprimer provides ultimate image quality and can be applied in multiple environments for various applications.

EVS 3643 & EVS 2430W, Exprimer's two portable models provide limitless portability with reliable operation.

Upgrade Now! Experience unbeatable performance of Exprimer and increase your productivity and diagnostic confidence!

- ① EVS 3643 ② EVS 2430W ③ EVS 2430 ④ EVS 4343  
⑤ Protection Suit ⑥ Battery Charger ⑦ PCP (Portable Console PC)

# Benefit from Excellent Quality X-ray Imaging with Exprimer

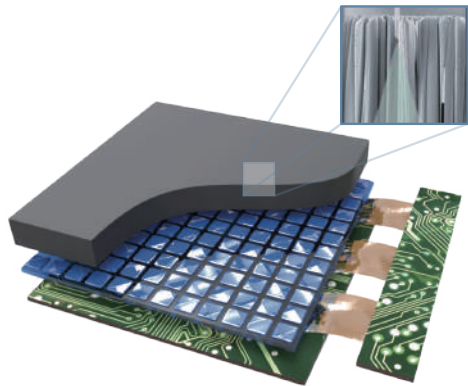


*Exprimer, the innovative digital x-ray solutions suit multiple diagnostic environments with different needs.*

- Excellent image quality using direct deposited CsI
- Ultimate sharpness image by TRUVIEW® ART
- Instant upgrade to digital mobile X-ray system
- Patient dose reduction with reliable Lossless AED
- High resistance to impact and vibration
- Low price fixed grid (120 lines / inch)
- Light weight and durable design for portable applications

## Intensified image sharpness with directly deposited CsI

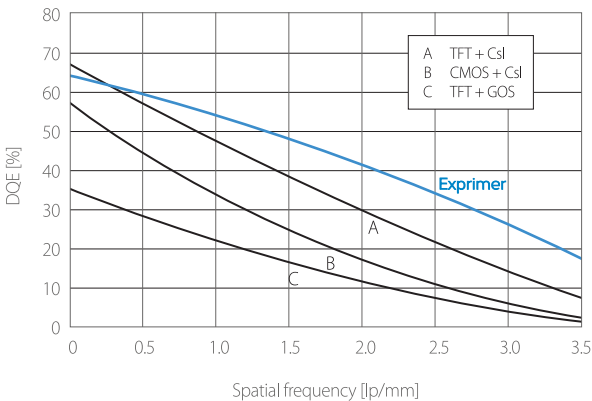
Directly deposited CsI can provide clearer images at lowest dispersion compared to conventional CsI and GOS scintillator. High quality images are not a result of any one feature such as smallest pixel size or low electronic noise, but achieved when all components of the detector are optimized to operate in harmony with each corresponding specification.



## Better DQE performance in higher spatial frequencies

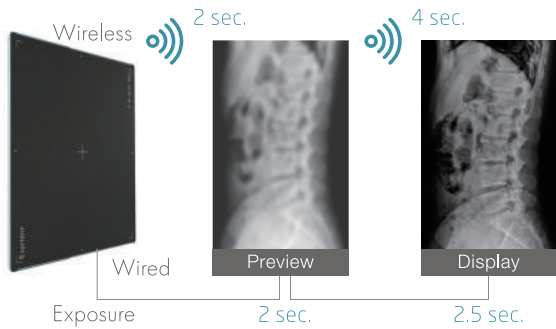
Exprimer with its well oriented direct deposition columnar structure CsI + TFT has high DQE performance providing outstanding high quality images. It also demonstrates comparably excellent DQE\* performance in high spatial frequency range.

\*DQE measurement condition: RQA-5 (Typical 2.6 uGy)



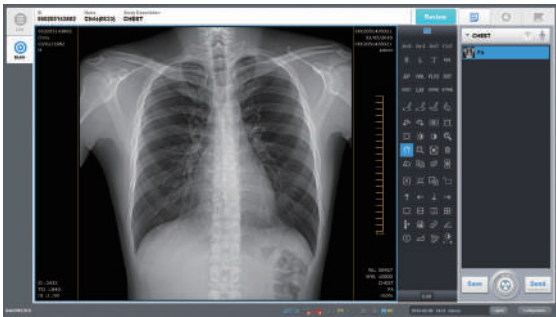
## Faster image display with high speed operating scheme

Fast image preview and display time of Exprimer products allow for more effective and efficient operation leading to increased productivity. Image preview in both wired and wireless modes are achieved less than 2 seconds and a full image is acquired in 4.5 and 6 seconds respectively.



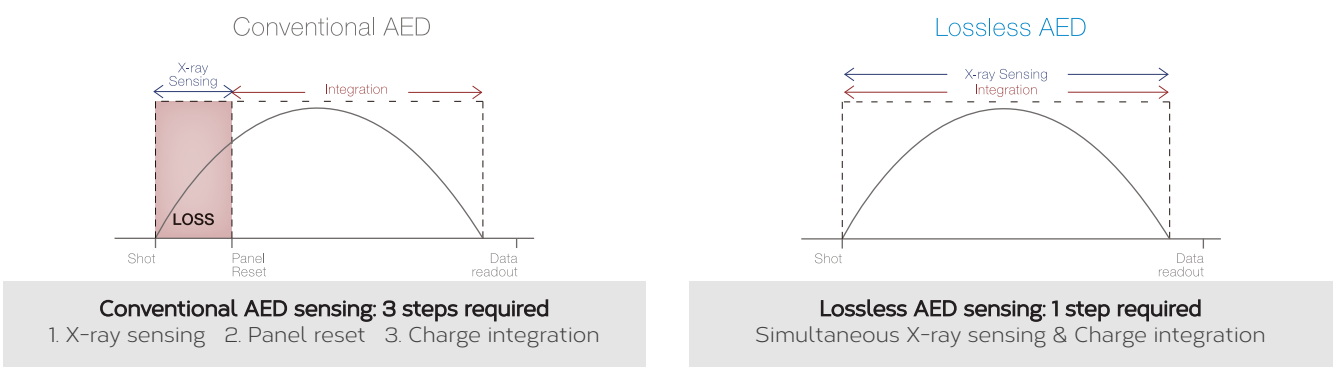
## Best image processing solution for fine tuned quality images ECONSOLE1 & TRUVIEW® ART

ECONSOLE1 (UI Software) and TRUVIEW® ART (image sharpening algorithm) provides a perfect solution to increase diagnostic productivity and accuracy. With easy to use convenient user interface design and powerful image processing engine, ECONSOLE1 & TRUVIEW® ART enables more accurate diagnosis with high quality and highly defined images.



# Lossless AED

Conventional AED function consists of three steps: X-ray sensing, panel reset, and charge integration. Integration time is delayed as extra time is required for panel reset which occurs after the panel senses the incoming x-ray signal. The loss is inevitable even when separate sensor modules within the detector system are used. When acquiring images of thick objects, the loss rate can increase even further. Lossless AED innovatively improved the reliability of sensitivity through operating scheme optimization.

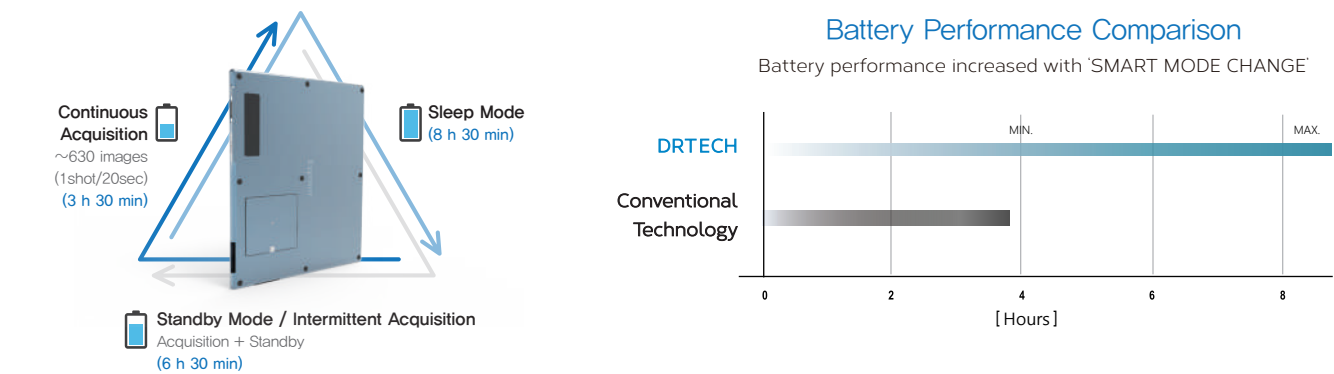


## Benefits of Lossless AED

- ✓ Patient dose reduction with more reliable x-ray sensing and integration
- ✓ Increased AED sensitivity
- ✓ Stable and highly accurate x-ray sensing
- ✓ Reliable operation without interruption by external shock or vibration
- ✓ Long lasting battery with low power consuming operating system
- ✓ Easy switch from sleep mode to acquisition mode with 'Smart Mode Changes'

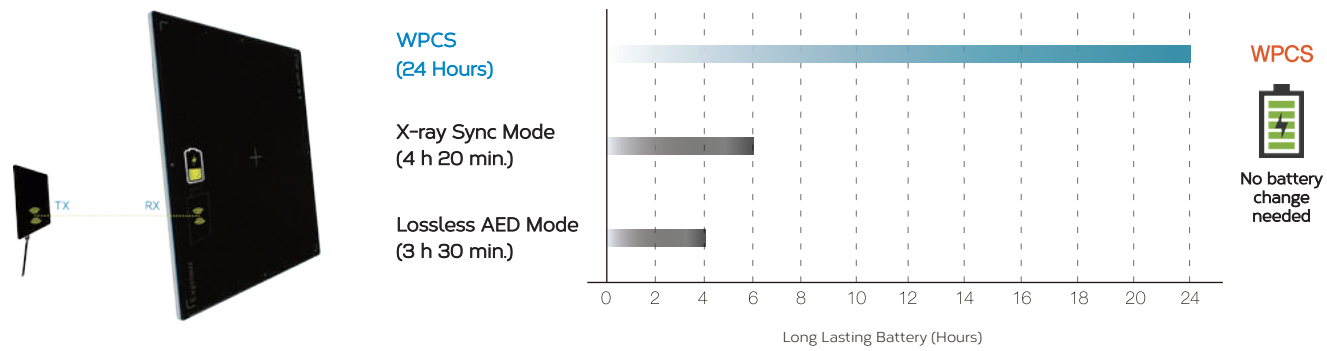
## Lossless AED Power Management with 'SMART MODE CHANGES'

Lossless AED Mode, Innovatively Improving Battery Performance



# WPCS – Wireless Power Charging System

EVS 3643 and EVS 2430W are embedded with industry's first wireless charging system to enable seamless 24 hour wireless operation for perfect portability. WPCS technology incorporates RX and TX power transmission technology to enable fast and effective wireless charging without the need for a battery change to provide ultimate convenience to its users.



## Benefits of WPCS

- ✓ Available in two forms for integration in every diagnostic environment
- ✓ Type : Bucky installation or Cradle
- ✓ Safer diagnostic environment with removal of hazardous wires and cables
- ✓ No need for battery change
- ✓ Fast and reliable battery charging
- ✓ Less product corrosion due to battery removal
- ✓ Longer battery life

## The Ultimate Versatility of Exprimer Mobile Detectors





### ▼ *EVS 4343*

- Robust and safety design against shock and drop
- High definition images by direct deposition Csl
- Fast image acquisition time less than 2 sec.
- Highly reliable and stable genrad.

## Slim Cassette Wired *EVS 4343*

General Radiography  
Portable Radiography



### ▼ *EVS 3643*

- Ultimate portability
- WPCS support (wireless battery charging)
- Light weight 2.98 kg and robust design
- Water proof function for increased reliability [IPX4]

## Slim Cassette Wireless *EVS 3643*

General Radiography  
Portable Radiography  
Mobile Radiography  
Vet. Portable  
Security / NDT



### ▼ *EVS 2430W*

- High definition imaging with smallest 76um pixel
- Ultimate portability
- WPCS Power System (Wireless Charging)
- Smart information by OLED display
- Light weight 1.9 kg (w. battery) and fancy design
- Various applications available
- Water proof function for increased reliability [IPX4]

## Slim Wireless *EVS 2430W*

General Radiography  
Mobile Radiography  
Neonatal / Pediatric  
Portable Radiography  
Equine  
Vet. Portable / Vet System  
Security / NDT



### ▼ *EVS 2430*

- High definition imaging with smallest 76um pixel
- High definition images by direct deposition Csl
- Highly reliable and stable genrad.
- Fast image acquisition
- Embedded x-ray trigger interface
- Designed to withstand shock and drop

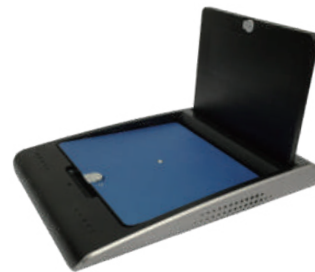
## Slim Wired *EVS 2430*

Dental Cephalo. System  
Podiatric System  
Mini U-arm System  
Vet System

# Innovative Technologies for Limitless Portability

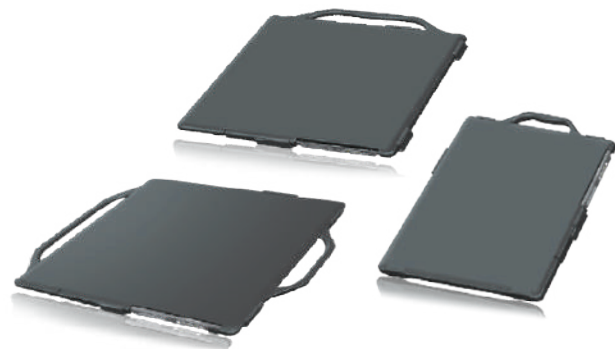
## Slim Dual Battery Charger

Simultaneous charging to two batteries is possible with the dual battery charger. With its horizontal and vertical insertion design, this charger supports both EVS 3643 and EVS 2430W batteries. Supported with 12V, charging on-the-go is possible as it connects with the cigar outlet of any car. The charger comes standards with EVS 3643 and EVS 2430W detectors.



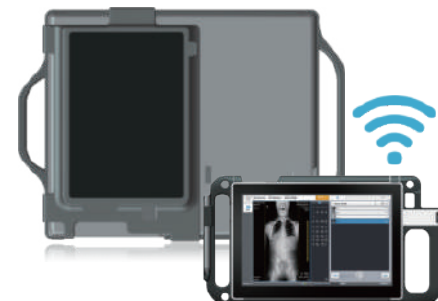
## Protection Suits

Available in three different designs to match varying user requirements and to protect your Exprimer detector in style from various environmental hazards. With an ergonomic design, you can achieve optimum usability in any x-ray environments. Combined with a tablet mounter, you can heighten your productivity with one compact package in any portable situations.



## PCP (Portable Console PC)

Instant digital upgrade is possible when PCP is combined with EVS 3643 or EVS 2430W. Eliminate the need for additional control box between the detector and the PC, and acquire digital images instantly with DRTECH's PCP. Inside AP maximizes the portability of Exprimer's portable detectors by allowing direct communication with tablet PCs and smart phones for image viewing on mobile devices. With a PCP and wireless communications, high definition images can be acquired anywhere and anytime allowing for unlimited outdoor and mobile imaging.



## EVS 3643 / EVS 2430W with Water Proof [IPX4]

EVS 3643 has the water resistance [IPX4] feature which provides protection against blood, sudden rain or other contaminants which can affect the detector performance in mobile applications. EVS 3643 delivers reliable performance in any environments and unexpected situations providing perfect portable solution for x-ray diagnostic imaging.

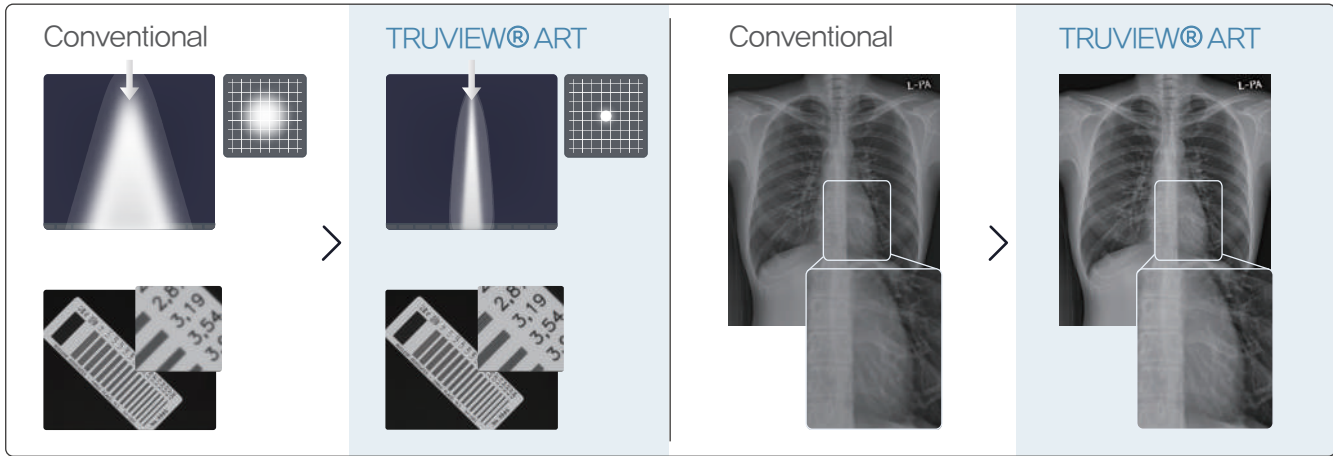


# TRUVIEW®ART



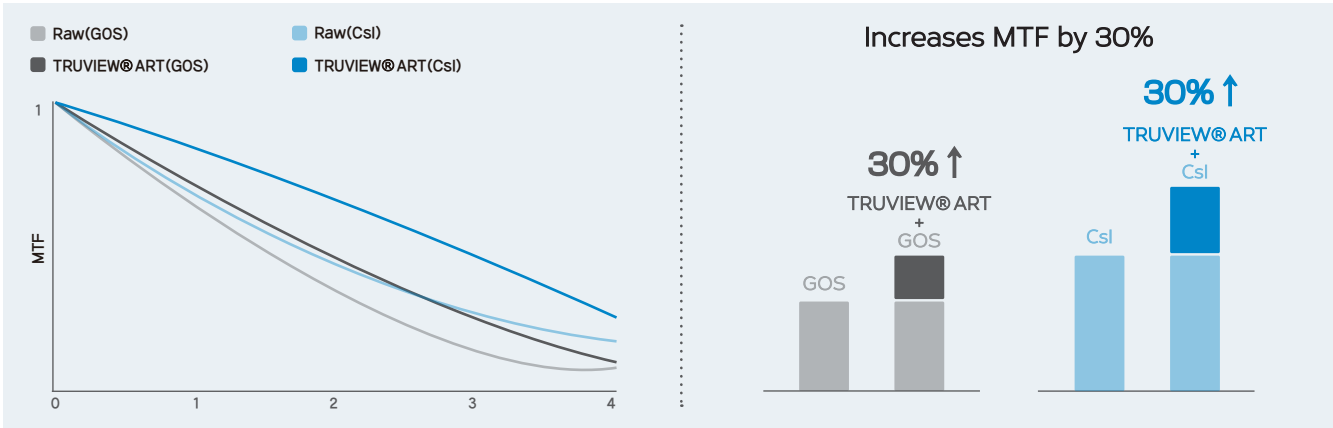
ADVANCED IMAGE RECONSTRUCTION TECHNOLOGY

Image sharpness of an object in a conventional image is reduced due to light dispersion. TRUVIEW®ART, unique reverse filtering technology using mathematical analysis, reconstructs and improves image sharpness to increase the possibility of detecting abnormalities.



## MTF Enhancement Effects of TRUVIEW®ART

This advanced image reconstruction technology increases MTF by 30%. Thanks to this solution, the image sharpness level of Exprimer Gadox models match up to that of conventional CsI panels, and the image sharpness of Exprimer CsI models is further enhanced by 30% increasing the MTF level of Exprimer detectors to the highest level.

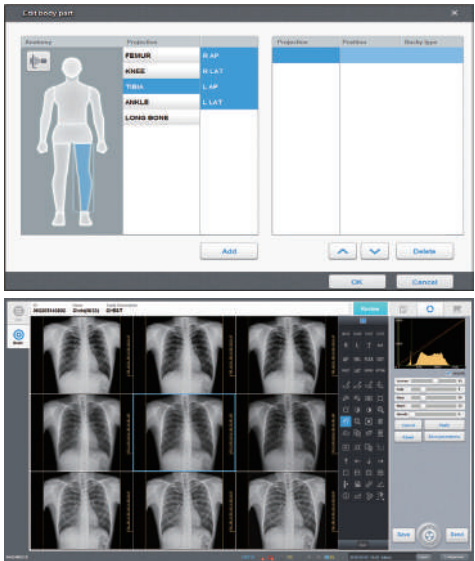
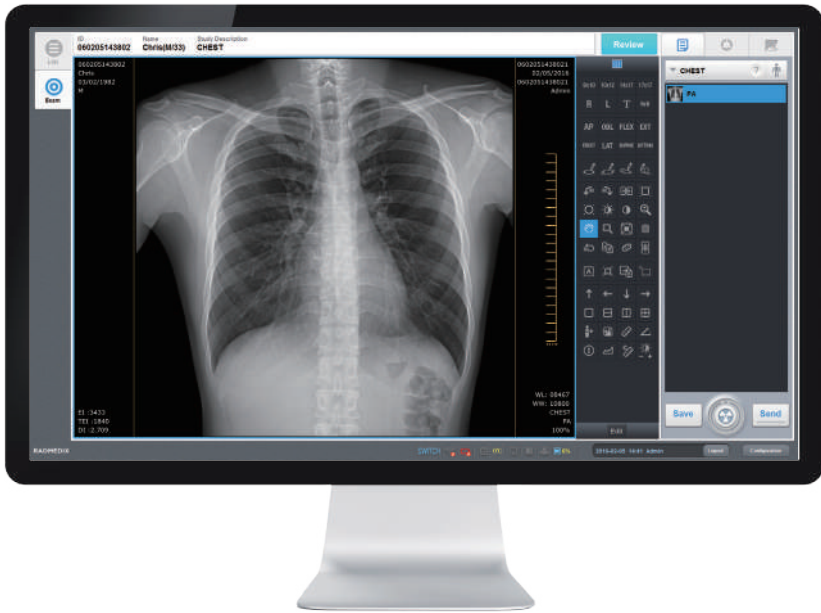


# ECONSOLE1

## Image Processing Engine

TRUVIEW® ART, DRTECH's proprietary algorithm feature of ECONSOLE1, reengineered the performance of Exprimer detectors. The MTF of Exprimer is improved by 30% by TRUVIEW® ART's Image reconstruction technology in conjunction with EVS detector's characteristics of direct deposition CsI and low noise electronic design. With this, the image quality of EVS detectors is significantly sharper than conventional indirect type detectors.

- ECONSOLE1  
X-ray Acquisition Software
- ECali1  
Image Calibration Software
- TRUVIEW®ART  
Advanced Reconstruction
- ETune1  
Parameter Tuning Software



## Excellent Post-Processing Image Quality

Optimized algorithms and parameters for each body part.  
Adaptive noise reduction to minimize image signal loss.  
Image detail enhancement by multi-frequency image processing.

## User Experience Design

Smart workflow minimizing the need for page switch and mouse click.  
Editable tool bar and dual monitor support.  
Easy to use stitching (up to 5 images).

## Image Parameter Tuning Wizard

User can select from 9 image styles processed using different parameters on a 3x3 matrix display.

## Tablet, Smart Phone Supports

Supports viewing of crystal clear digital images on display devices with WiFi communication such as Smart Phones and Tablets.

Specifications



EVS 4343



EVS 3643 [IPx4]

Model	EVS 4343 (Wired)	EVS 3643 (Wireless)
Detector Type	Direct deposition Csl or Gadox	Direct deposition Csl or Gadox
Weight	4.5 kg	2.98 kg
Active Area	430 X 430 mm	358 X 430 mm
Pixel Pitch	140 μm	140 μm
Resolution	3,072 X 3,072	2,560 X 3,072
A/D Conversion	14 bit	14 bit
Input Voltage	DC 12V, 5A	DC 12V, 5A
Communication	Giga Ethernet	Giga Ethernet / IEEE 802.11n (5 GHz)
X-ray I/F	Lossless AED / Sync Trigger	Lossless AED / Sync Trigger



EVS 2430W [IPx4]



EVS 2430

Model	EVS 2430W (Wireless)	EVS 2430 (Wired)
Detector Type	Direct deposition Csl or Gadox	Direct deposition Csl or Gadox
Weight	1.9 kg	1.9 kg
Active Area	233.47 x 291.84 mm	233.47 x 291.84 mm
Pixel Pitch	76 μm	76 μm
Resolution	3,072 X 3,840	3,072 X 3,840
A/D Conversion	16 bit	16 bit
Input Voltage	DC 12V, 5A	DC 12V, 5A
Communication	Giga Ethernet / IEEE 802.11n (5 GHz)	Giga Ethernet
X-ray I/F	Lossless AED	Lossless AED/ Sync Trigger

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