



4Direct Flat Panel Detector 14x17VW Wired

Portable Flat Panel Detector
For Digital Radiography



4Direct Flat Panel Detector 14x17VW Wired is a flat panel digital radiography cassette system with 14" x 17" coverage area for general radiographic applications using its unique image processing system and proprietary flat panel detector. With the same size as a film or a CR cassette, it is an excellent solution for upgrading conventional X-ray system. User friendly imaging software, DxWorks is compliant with DICOM 3.0 standard and provides consistent image quality at a dramatically reduced dose and faster image information with optimized algorithm for each different study. It only takes a few simple steps to acquire and transmit images to the DICOM server through Gigabit Ethernet.



4Direct Flat Panel Detector 14x17VW Wired

Portable Flat Panel Detector for Digital Radiography

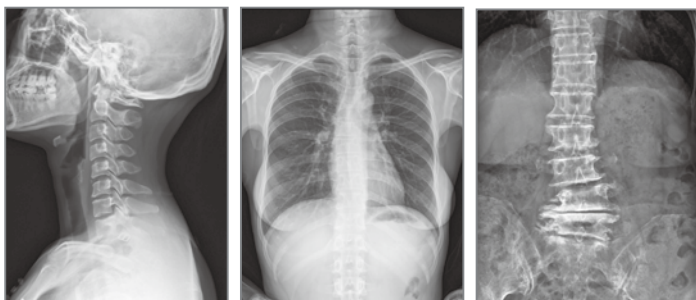
Features

- * Wide active area of 14" x 17"
- * High spatial resolution with 140um pixel array
- * Stable and reliable automatic exposure detection
- * Viewer software running on Windows™ OS (DxWorks)
- * Communication interface through Gigabit Ethernet (1000 BASE-T)
- * Simple and easy integration with all kinds of digital radiography system

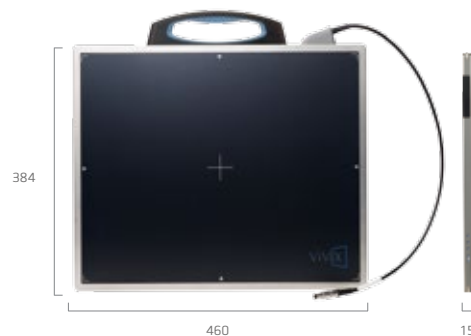


Configuration
Detector
System Control Unit

Acquired Images



Drawing



Technical Specification

Application	General radiography
Technology	Flat panel detector : a-Si TFT with PIN diode
Scintillator	CsI:TI / Gd ₂ O ₂ S:Tb
Pixel Pitch	140um x 140um
Pixels	2,560 x 3,072 pixels
Image Size	14 x 17 inches (35 x 43cm)
A/D Conversion	14 bit
Grayscale	16,384 steps
X-ray Voltage Range	40 ~ 150kVp
X-ray Generator Interface	Line trigger : DR Trigger Mode Auto trigger : AED (Automatic Exposure Detection) Mode
Data Interface	Gigabit Ethernet (1000BASE-T) via PoE (Power over Ethernet)
Extension Cable	GigE communication and power supply (7m)
Dimensions	460 (W) x 384 (L) x 15 (T) mm
Weight	Approx. 2.9kg (GADOX) / 3.1kg (CsI)
Operating Environment	15 ~ 35°C, 30 ~ 85% RH (non-condensing)
Power	DC24V, 0.5A

* Specifications are subject to change without prior notification.



4Direct Flat Panel Detector 14x17VW Wireless

Wireless Portable Flat Panel Detector
for Digital Radiography



4Direct Flat Panel Detector 14x17VW Wireless is a 14" x 17" flat panel detector for general radiographic applications using its unique image processing system. With the size the same as that of CR cassette or films, it fits into almost all existing bucky trays. It is easy to acquire and instantly transmit images to the DICOM server through Wi-Fi network. The battery charger can recharge up to 3 batteries at the same time within 2 hours. An additional tether cable connection to the detector can also recharge the battery without removing it from the detector. AP mode enables customers to take X-ray examinations directly to a computer or a laptop with Wi-Fi connection. In case of disconnection of Wi-Fi network between the detector and the image acquisition software, the detector can save up to 100 images at its on-board memory. After resuming communication with the detector, all saved images can be transmitted to the software.



4Direct Flat Panel Detector 14x17VW Wireless

Wireless Portable Flat Panel Detector for Digital Radiography

Features

- * Wide active area of 14" x 17"
- * High spatial resolution with 140um pixel array
- * Wi-Fi data transfer with dual band (2.4GHz and 5GHz)
- * Stable and reliable automatic exposure detection
- * Direct communication with smart devices
- * Viewer software running on Windows™ OS (DxWorks)



Configuration
Detector
System Control Unit
Charger

Acquired Images



Drawing



Technical Specification

Application	General radiography
Technology	Flat panel detector : a-Si TFT with PIN diode
Scintillator	CsI:TI / Gd ₂ O ₂ S:Tb
Pixel Pitch	140um x 140um
Pixels	2,560 x 3,072 pixels
Image Size	14 x 17 inches (35 x 43cm)
A/D Conversion	14 bit
Grayscale	16,384 steps
X-ray voltage range	40 ~ 150kVp
X-ray generator Interface	Line trigger : DR Trigger Mode Auto trigger : AED (Automatic Exposure Detection) Mode
Wireless Interface	IEEE 802.11a/b/g/n (2.4GHz/5GHz dual band)
Dimensions	460 (W) x 384 (L) x 15 (T) mm
Weight	Approx. 3.3kg (GADOX) / 3.4kg (CsI)
Operating Environment	15 ~ 35°C, 30 ~ 85% RH (non-condensing)
Power	DC24V, 0.5A (Wired Mode) / 7.4V 4,000mAh Lithium Ion Polymer Battery

* Specifications are subject to change without prior notification.



4Direct Flat Panel Detector 17x17VW

Wide and Slim Portable Flat Panel Detector
for Digital Radiography



4Direct Flat Panel Detector 17x17VW is new slim portable flat panel detector for digital radiography with wide active area of 17" x 17". It features unique wireless communication method, AP mode allows users directly connect to the detector with laptops, tablet PCs and even smart phones. Furthermore, reliable automatic X-ray exposure detection enables integration with any kind of X-ray systems. Both CsI and GADOX scintillator types are available, with both wired and wireless configurations for each scintillator type.





4Direct Flat Panel Detector 17x17VW

Wide and Slim Portable Flat Panel Detector for Digital Radiography

Features

- * Wide active area of 17" x 17"
- * Slim and portable
- * High spatial resolution with 140um pixel array
- * Wi-Fi data transfer with dual band (2.4GHz and 5GHz)
- * Stable and reliable automatic exposure detection
- * Direct communication with smart devices
- * Viewer software running on Windows™ OS (DxWorks)

Drawing



Configuration
Detector
System Control Unit
Charger

Technical Specification

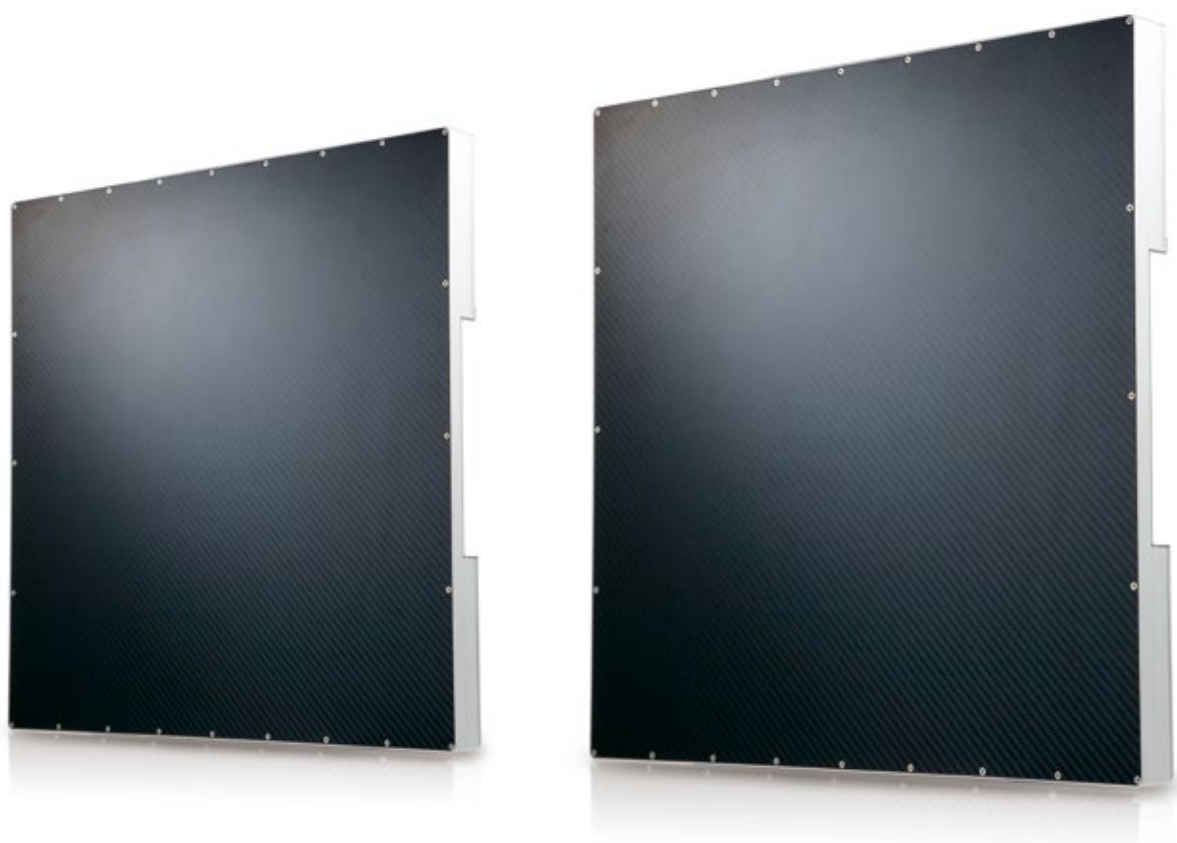
Application	General radiography
Technology	Flat panel detector : a-Si TFT with PIN diode
Scintillator	CsI:TI / Gd ₂ O ₂ S:Tb
Pixel Pitch	140um x 140um
Spatial Resolution	3.6lp/mm
Pixels	3,072 x 3,072 pixels
Image Size	17 x 17 inches (43 x 43cm)
A/D Conversion	16 bit
Grayscale	65,536 steps
X-ray Voltage Range	40 ~ 150kVp
X-ray Generator Interface	Line trigger : DR Trigger Mode Auto trigger : AED (Automatic Exposure Detection) Mode
Wireless Interface	IEEE 802.11n (2.4GHz/5GHz dual band)
Wired Interface	Gigabit Ethernet (1000BASE-T) via PoE (Power over Ethernet)
Image Acquisition Time	1 sec (Wired) / 3 sec (Wireless)
Dimensions	460 (W) x 460 (L) x 15 (T) mm
Weight	Approx. 4.1kg (GADOX) / 4.2kg (CsI)
Operating Environment	15 ~ 35°C, 30 ~ 85% RH (non-condensing)
Power	DC24V, 0.8A, Max. 20W
Battery	Lithium Ion / 3,100mAh x 2 = 6,200mAh

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4Direct Flat Panel Detector 17x17VW

Flat Panel Detector for Digital Radiography



4Direct Flat Panel Detector 17x17VW is a flat panel detector with a large field coverage area of 17"x17", which is designed for general radiographic application using its unique image processing system and proprietary flat panel detector. The active 9.4 Mega-pixel sensor ensures superior image quality to meet market demand for precise diagnosis performance, which is made possible by the NMI's digital radiographic flat panel detector technology. With automatic exposure detection, 4Direct Flat Panel Detector 17x17VW can be used without connection to the X-ray generator. It works just like CR or film as it is triggered by the radiation, instead of a generator interface connection.

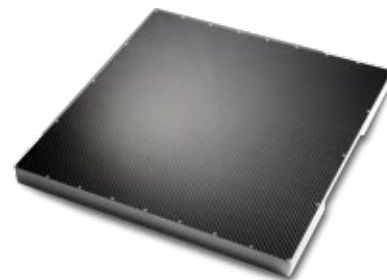


4Direct Flat Panel Detector 17x17VW

Flat Panel Detector for Digital Radiography

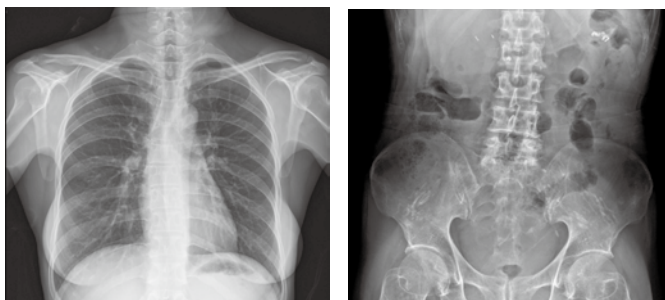
Features

- * Wide active area of 17" x 17"
- * High spatial resolution with 140um pixel array
- * Stable and reliable automatic exposure detection
- * Viewer software running on Windows™ OS (DxWorks)
- * Communication interface through Gigabit Ethernet (1000 BASE-T)
- * Simple and easy integration with all kinds of digital radiography systems



Configuration
Detector
Power Supply Unit

Acquired Images



Drawing



Technical Specification

Application	General radiography
Technology	Flat panel detector : a-Si TFT with PIN diode
Scintillator	CsI:TI / Gd ₂ O ₂ S:Tb
Pixel Pitch	140um x 140um
Pixels	3,072 x 3,072 pixels
Image Size	17 x 17 inches (43 x 43cm)
A/D Conversion	14 bit
Grayscale	16,384 steps
X-ray Voltage Range	40 ~ 150kVp
X-ray Generator Interface	Line trigger : DR Trigger Mode Auto trigger : AED (Automatic Exposure Detection) Mode
Data Interface	Gigabit Ethernet (1000BASE-T)
Dimensions	470 (W) x 470 (L) x 35 (T) mm
Weight	Approx. 11kg
Operating Environment	15 ~ 35°C, 30 ~ 80% RH (non-condensing)
Power	DC24V, 0.8A

* Specifications are subject to change without prior notification.



Diagnóstico
por Imagen Digital

4Direct Flat Panel Detector 10x12VW

Versatile Portable Flat Panel Detector
for Digital Radiography



4Direct Flat Panel Detector 10x12VW is new portable flat panel detector for digital radiography in various applications such as neonatal, ENT, equine, and cephalometry, etc. with active area of 10" x 12". Its 124um pixel TFT sensor gives high resolution image and its Wi-Fi communication system provides fast wireless transfer speed. It enables users to directly connect to the detector with laptops, tablet PCs and even smart phones. Furthermore, it offers reliable automatic X-ray exposure detection, enables users to perform examination with any kinds of X-ray systems. The product is available in both CSI and GADOX scintillator types.





4Direct Flat Panel Detector 10x12VW

Versatile Portable Flat Panel Detector for Digital Radiography

Features

- * Active area of 10" x 12"
- * Various applications such as neonatal, ENT, equine and cephalometry
- * High spatial resolution with 124um pixel array
- * Wi-Fi data transfer with dual band (2.4GHz and 5GHz)
- * Stable and reliable automatic exposure detection
- * Direct communication with smart devices
- * Viewer software running on Windows™ OS (DxWorks)

Drawing



Configuration
Detector
System Control Unit
Charger

Technical Specification

Application	General radiography, neonatal, ENT, equine and cephalometry
Technology	Flat panel detector : a-Si TFT with PIN diode
Scintillator	CsI:Tl / Gd ₂ O ₂ S:Tb
Pixel Pitch	124um x 124um
Spatial Resolution	4lp/mm
Pixels	2,048 x 2,560 pixels
Image Size	10 x 12 inches (25 x 32cm)
A/D Conversion	16 bit
Grayscale	65,536 steps
X-ray Voltage Range	40 ~ 150kVp
X-ray Generator Interface	Line trigger : DR Trigger Mode Auto trigger : AED (Automatic Exposure Detection) Mode
Wireless Interface	IEEE 802.11n (2.4GHz/5GHz dual band)
Image Acquisition	1 sec (Wired), 3 sec (Wireless)
Dimensions	350 (W) x 287 (L) x 15 (T) mm
Weight	Approx. 2.1kg (GADOX) / 2.2kg (CsI)
Operating Environment	15 ~ 35°C, 30 ~ 85% RH (non-condensing)
Power	DC24V, 0.7A, Max. 17W
Battery	Lithium Ion / 3,100mAh

* Specifications are subject to change without prior notification.



Diagnóstico
por Imagen Digital

Digital Radiographic System





Digital Radiographic System

Technical Specification

High Voltage Generator

		Option
Rating Output	220/240Vac, 50-60Hz, 40KW Single Phase	400/480Vac, 50-60Hz, 50KW Three Phase
Tube Voltage kV	40-150kV	40-150kV
kV Accuracy	±10%	±10%
mA Range	10 mA~ 500 mA	10 mA~ 630 mA
Timer Range	0.001 sec ~ 10 sec	0.001 sec ~ 6.3 sec
mAs Range	0.1mAs~ 630mAs	0.1mAs~ 630mAs
Weight	63kg / 2kg	61kg / 2.72kg
Dimensions	571 x 476 x 428 / 400 x 200 x 42	653 x 348 x 617 / 313 x 277 x 94

X-ray Tube

	Option	TOSHIBA
Manufacturer	E7252X	E7239X
Effective Focal Spot Size	0.6 / 1.2 mm	1.0 / 2.0 mm
Target	Material	tungsten rhenium molybdenum
Angle	12°	16°
Nominal Tube Voltage	40~150 kV	40~150 kV
Anode Heat Storage Capacity	300 KHU	140 KHU
Weight	18 kg	16 kg

Collimator

		Option
Power Input	24V AC – 50/60 Hz	24V AC – 50/60 Hz
Form of X-ray Beam Field	Rectangular	Rectangular
Light projection	More than 160Lux at SID 100cm	Single Laser
Maximum Tube Voltage	150 kV	150 kV
Inherent Filtration	1.2 mmAl	2 mmAl
Weight	6.2 kg	9.4 kg
Dimensions	268 x 195.5 x 206.5 (mm)	268 x 195.5 x 206.5 (mm)

Tube Stand

		Option : Ceiling Tube Support)
Power rating	DC24V±10%, 3A	DC24V±10%, 3A
Movement of Tube	Manual driven	Manual driven
Vertical travel	1,400mm	1,400mm ~ 2,000mm
Transverse travel	2,600mm	1,400mm ~ 2,000mm
Movement Range	Min. ~ Max. Tube height 520mm ~ 1,920mm	2,700mm ~ 4,000mm ±10%
Column rotation	±90°	±90°
Tube rotation	±180°	±180°
Weight balance	Applied	Applied
Weight	245kg	350kg

Bucky Stand

Power rating	AC16~24V±10%, 1.5A
Movement of Detector	Vertical : Manual driven
Movement Range Vertical Stroke	1400mm±10%
Weight balance	Applied
Weight	105kg

Bucky Table 4Way (Option : 6way)

Power rating	AC220V±10%, 100VA
Movement of Detector	Manual driven
Movement Range	Longitudinal Travel distance Transverse travel distance Bucky travel distance
Weight	±280mm ±140mm ±230mm 180kg

Overall Dimension

