Saturn 8000 14x17 Wired

Portable Flat Panel Detector For Digital Radiography



Saturn 8000 14x17 Wired is a NMI's 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.



Saturn 8000 14x17 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 System Control Unit

Acquired Images







Drawing



Technical Specification

Application General radiography

Technology Flat panel detector: a-Si TFT with PIN diode

Scintillator CsI:TI / Gd2O2S: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 16,384 steps Grayscale X-ray Voltage Range 40 ~ 150kVp

Line trigger: DR Trigger Mode X-ray Generator Interface

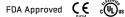
> Auto trigger: AED (Automatic Exposure Detection) Mode Gigabit Ethernet (1000BASE-T) via PoE (Power over Ethernet)

Extension Cable GigE communication and power supply (7m)

460 (W) x 384 (L) x 15 (T) mm Dimensions Approx. 2.9kg (GADOX) / 3.1kg (Csl) Weight Operating Environment 15 ~ 35°C, 30 ~ 85% RH (non-condensing)

Power DC24V, 0.5A

* Specifications are subject to change without prior notification.



Data Interface





Office

3F., NO.32, Sec. 2, Zhonyang S. Rd., Beitou Dist., Taipei City 11270, Taiwan

Factory

41-3, Burim-ro 170beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055 Republic of KOREA





Saturn 8000 14x17 Wireless

Wireless Portable Flat Panel Detector for Digital Radiography



Saturn 8000 14x17 Wireless is a NMI's 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.



Saturn 8000 14x17 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)



Acquired Images







Drawing



Technical Specification

Application General radiography

Technology Flat panel detector: a-Si TFT with PIN diode

Scintillator CsI:TI / Gd₂O₂S:Tb Pixel Pitch 140um x 140um 2,560 x 3,072 pixels Pixels 14 x 17 inches (35 x 43cm) Image Size

A/D Conversion 14 hit 16,384 steps Grayscale 40 ~ 150kVp X-ray voltage range

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.







Office

3F., NO.32, Sec. 2, Zhonyang S. Rd., Beitou Dist., Taipei City 11270, Taiwan

Factory

41-3, Burim-ro 170beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055

Republic of KOREA



Saturn 8000 17x17N

Wide and Slim Portable Flat Panel Detector for Digital Radiography



Saturn 8000 17x17N is NMI's new slim portable flat panel detector for digital radiography with wide active area of 17" x 17". It features NMI's 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.



Saturn 8000 17x17N



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)



Configuration System Control Unit Charger

Drawing





Technical Specification

Application General radiography

Flat panel detector: a-Si TFT with PIN diode Technology

CsI:TI / Gd₂O₂S:Tb Scintillator Pixel Pitch 140um x 140um Spatial Resolution 3.6lp/mm

Pixels 3,072 x 3,072 pixels 17 x 17 inches (43 x 43cm) Image Size

A/D Conversion Grayscale 65,536 steps X-ray Voltage Range 40 ~ 150kVp

Line trigger: DR Trigger Mode X-ray Generator Interface

Auto trigger: AED (Automatic Exposure Detection) Mode

Wireless Interface IEEE 802.11n (2.4GHz/5GHz dual band)

Gigabit Ethernet (1000BASE-T) via PoE (Power over Ethernet) Wired Interface

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 (Csl) 15 ~ 35°C, 30 ~ 85% RH (non-condensing) Operating Environment

Power DC24V, 0.8A, Max. 20W

Battery Lithium Ion / 3,100mAh x 2 = 6,200mAh

* Specifications are subject to change without prior notification.







Office

3F., NO.32, Sec. 2, Zhonyang S. Rd., Beitou Dist., Taipei City 11270, Taiwan

Factory

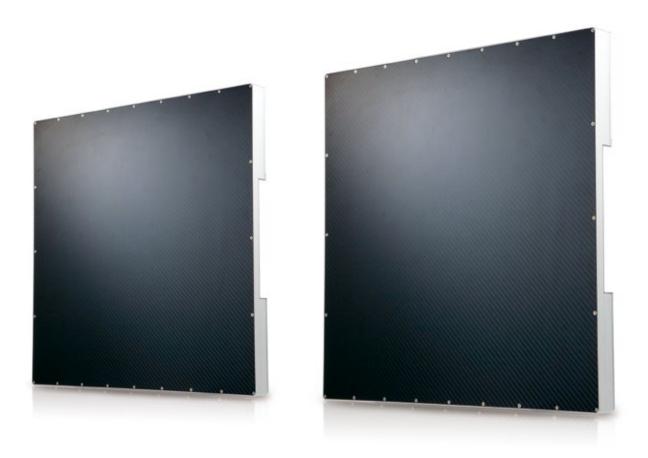
41-3, Burim-ro 170beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055

Republic of KOREA



Saturn 8000 17x17

Flat Panel Detector for Digital Radiography



Saturn 8000 17x17 is a NMI's 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, Saturn 8000 17x17 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.



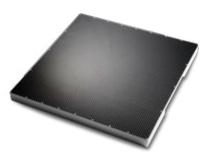
Saturn 8000 17x17

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 / Gd₂O₂S: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

Line trigger: DR Trigger Mode X-ray Generator Interface

Auto trigger: AED (Automatic Exposure Detection) Mode

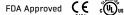
Data Interface Gigabit Ethernet (1000BASE-T) Dimensions 470 (W) x 470 (L) x 35 (T) mm

Weight Approx. 11kg

Operating Environment 15 ~ 35°C, 30 ~ 80% RH (non-condensing)

DC24V, 0.8A Power

* Specifications are subject to change without prior notification.







Office

3F., NO.32, Sec. 2, Zhonyang S. Rd., Beitou Dist., Taipei City 11270, Taiwan

Factory

41-3, Burim-ro 170beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055

Republic of KOREA



Saturn 8000 10x12N

Versatile Portable Flat Panel Detector for Digital Radiography



Saturn 8000 10x12N is NMI's 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.



Saturn 8000 10x12N

Versatile Portable Flat Panel Detector for Digital Radiography



Features

- * Active area of 10" x 12"
- * Various applications such as neonatal, ENT, equine and cephalomerty
- * 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

Technical Specification

General radiography, neonatal, ENT, equine and cephalometry Application

Flat panel detector: a-Si TFT with PIN diode Technology

Scintillator CsI:TI / Gd₂O₂S:Tb Pixel Pitch 124um x 124um

Spatial Resolution 4lp/mm

Pixels 2,048 x 2,560 pixels 10 x 12 inches (25 x 32cm) Image Size

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) 350 (W) x 287 (L) x 15 (T) mm Dimensions Approx. 2.1kg (GADOX) / 2.2kg (Csl) Weight 15 ~ 35°C, 30 ~ 85% RH (non-condensing)

Operating Environment Power DC24V, 0.7A, Max. 17W Batteru Lithium Ion / 3,100mAh

^{*} Specifications are subject to change without prior notification.







Office

3F., NO.32, Sec. 2, Zhonyang S. Rd., Beitou Dist., Taipei City 11270, Taiwan Tel +886-2-2892-2275 Fax +886-2-2892-2172 E-mail Sales@newmedical.com.tw

Factory

41-3, Burim-ro 170beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055

Republic of KOREA



SATURN







3F., No32, Sec. 2, Zhongyang S.Rd., Beitou Dist., Taipei City 112, Taiwan Tel. 886-2-28922275 Fax. 886-2-28922172 E-mail. sales@newmedical.com.tw



41-3, Burim-ro 170beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055 Republic of KOREA









Technical Specification

High Voltage Generator

Rating Output Tube Voltage kV kV Accuracy mA Range TimerRange mAs Range Weight Dimensions 220/240Vac, 50-60Hz, 40KW Single Phase

40-150kV ±10% 10 mA ~ 500 mA 0.001 sec ~ 10 sec 0.1mAs ~ 630mAs 63kg / 2kg 571 × 476 × 428 / 400 × 200 × 42 **Option**400/480Vac, 50-60Hz, 50KW Three Phase
40-150kV

±10%
10 mA~ 630 mA
0.001 sec ~ 6.3 sec
0.1mAs~ 630mAs
61kg / 2.72kg
653 × 348 × 617 / 313 × 277 × 94

X-ray Tube

Manufacturer
Effective Focal Spot Size
Target | Material Angle
Nominal Tube Voltage
Anode Heat Storage Capacity
Weight

Option TOSHIBA

E7252X E7239X 0.6 / 1.2 mm 1.0 / 2.0 mm tungsten rhenium molybdenum 12° 16°

12° 16° 40~150 kV 40~150 kV 300 KHU 140 KHU 18 kg 16 kg

Collimator

Power Input
Form of X-ray Beam Field
Rectangular

Light projection
Maximum Tube Voltage
Inherent Filtration
Weight
Dimensions

24V AC - 50/60 Hz
Rectangular

More than 160Lux at SID
100cm
150 kV
11.2 mmAl
6.2 kg
0 mensions

Rectangular Single Laser

150 kV 2 mmAl 9.4 kg 268 x 195.5 x 206.5 (mm)

Option 24V AC – 50/60 Hz

Tube Stand

Power rating
Movement of Tube

Movement Range

Weight balance

Weight

Vertical travel
Transverse travel
Min. ~ Max. Tube height
Column rotation
Tube rotation

DC24V±10%, 3A Manual driven 1,400mm 2,600mm 520mm ~ 1,920mm ±90°

±180°

Applied

245kg

DC24V±10%, 3A

Manual driven
1,400mm ~ 2,000mm
1,400mm ~ 2,000mm
2,700mm ~ 4,000mm ±10%
±90°
±180°

Applied

350kg

AC220V±10%, 100VA

180kg

Option: Ceiling Tube Support)

Bucky Stand

Bucky Table 4Way (Option: 6way)

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

Weight

or Manual driven
Longitudinal Travel distance ±280mm
Transverse travel distance ±140mm
Bucky travel distance ±230mm

Bucky travel distance



