

**X-Ray FLAT PANEL IMAGER
FDX3543RPW**

**Active Area: 354 (H) × 426 (V) mm
(13.6" × 16.5")**

FEATURING:

- **Excellent Sensitivity & Resolution**
- **Excellent Image Quality**
- **Excellent Reliability**

– Excellent Sensitivity & Resolution –

- Advanced and proven fine structured CsI:TI and direct vapor deposition technology deliver higher sensitivity and resolution.
- Reflection coating on CsI:TI screen enables excellent Detective Quantum Efficiency (DQE) and high Modulation Transfer Function (MTF).
- Lower radiation dose beneficial to patients as a result of excellent image quality. The FDX3543RPW offers a new level of functionality and reliability for system manufacturers.

– Excellent Reliability –

- Excellent durability by using CsI:TI screen direct vapor deposition method.
- The structure is highly reliable and protected from degradation by use of a unique moisture-proof sealing method for the CsI:TI screen

INTENDED USE:

FDX3543RPW is an X-Ray FLAT PANEL IMAGER for radiographic use. This device can be used with an x-ray generator. It provides digital signal by detecting X-rays which pass through patient body and strike its surface. It does not provide clinical image, nor function of controlling X-ray generator.

For medical diagnosis, it additionally requires image processing with application software to visualize digital image. It is not intended to use for mammography, and angiography applications.

COMPONENTS AND CHARACTERISTICS

Sensor Unit:

Sensor Protection Plate	Carbon Fiber Plate
Cooling	Natural Air Cooling
Input	DC16V (from Power Supply)
Power Consumption	Maximum 13W
	Maximum 20W (with Battery Charging)
Outline Dimensions	383.5 × 459.5 × 15mm (W(H) × D(V) × (H))
Weight	3.2kg

Power Supply: DEPS9601

Input	AC100-240V 1.0A
	50/60Hz
Output	DC16V 3A
Outline Dimensions	155 × 208 × 65mm (W(H) × D(V) × (H))
Weight	1.2kg

Main Cable: MI39-01545A

Cable length	7m
Cable Diameter	ϕ 8~9mm

Li-ion Battery: SDB-3S1PA

Nominal Capacity	3400mAh
Nominal Voltage	11V
Outline Dimensions	245 × 130 × 8.5mm (W(H) × D(V) × (H))
Weight	385g

Battery Recharger: DEPS-9606

Outline Dimensions	281.6 × 206.6 × 21.2mm (W(H) × D(V) × (H))
Weight	500g

AC Adapter: EPS-F007A (Model No.: SPU100-107)

Outline Dimensions	76 × 146 × 43 mm (W(H) × D(V) × (H))
Cable Length	430mm
Input	AC100-240V 1.2-0.5A
	47-63Hz
Output	DC19V 5.26A
Weight	Aprox.510g

Note: Prepare the suitable AC cables by X-ray system manufacturer.

Environmental:

Under operating

Temperature +10 ~ 35°C

Humidity 20 ~ 75%
(Non-Condensing)

Pressure 70 ~ 106kPa

Under delivery and stock

Temperature -15 ~ 55°C

Humidity 10 ~ 95%
(Non-Condensing)

Pressure 50 ~ 106kPa

Note:

- (1) Storing a Li-ion battery at high temperatures will accelerate its deterioration.
When storing a Li-ion battery for a long time, be careful about storage temperature.
Recommendation temperature for long time storage: 10 ~ 35°C.
- (2) The battery should be sufficiently acclimatized to the environment where it will be used
(10 ~ 35°C) before use.

Accessories:

CD:

CD (Defect map, SDK) 1pcs

MAIN CHARACTERISTICS

Image Format:

X-ray Conversion Layer	Cesium Iodide (CsI) with Amorphous Silicon (a-Si) Photodiode
Active Area	345(H) × 426 (V)mm
Pixel Matrix	2466(H) × 3040(V)
Pixel Pitch	140μm
Cycle Time	Shot to Shot 12sec (WLAN) Shot to Shot 9sec (Ethernet)

(Cycle time is the time to complete image transfer from the X-ray Exposure. Cycle time does not include image processing time. The image processing time is determined by the specifications of the image processing unit.)

Performance:

Limiting Resolution	3.7Lp/mm typ.
MTF (2.0Lp/mm, 70kVp, 1×1)	36% typ.
DQE (DQE (0), Quantum - Limited)	> 70%
A/D Conversion	16bit

Functions:

Auto Exposure Detection (AED)	Available in Tethered mode and Wireless Mode
Double Exposure	Available in Tethered Mode

Ratings:

Energy Range	40-150kVp
Maximum Entrance Dose (Linear Output Range)	4mR

Interface:

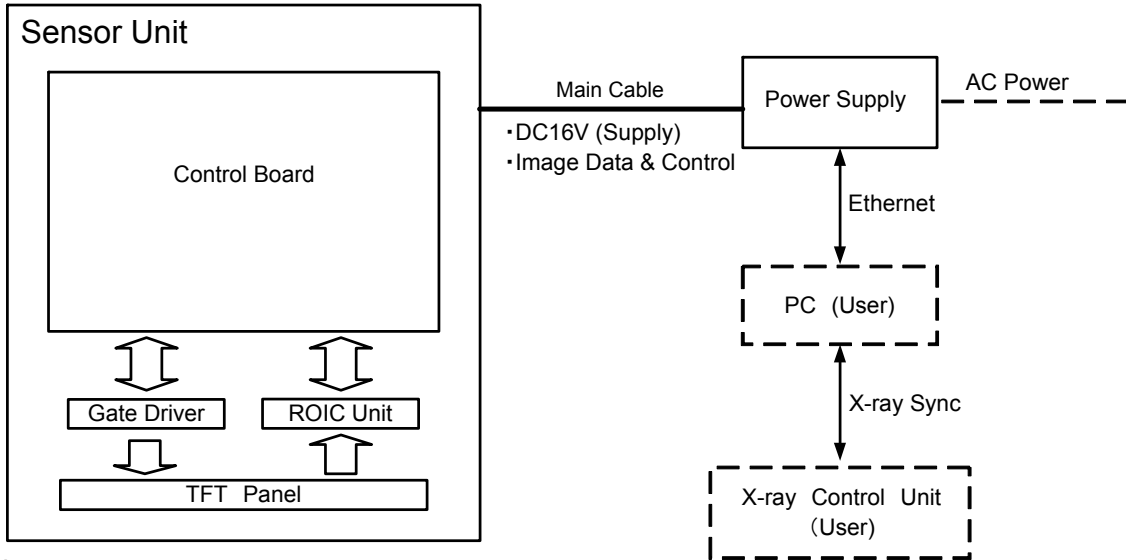
Sensor Unit	
Unit Interface	Connect to power Supply
Power Supply	
Unit Interface	Connect to Sensor Unit
Data Output	14bit Digital Output Ethernet (1000BASE-T)
Command Control	Ethernet (1000BASE-T)
Power Input	AC100-240V 1A 50/60Hz
WLAN	IEEE802.11a/b/g/n 2.4GHz/5GHz

Image Acquisition Exposure period:

X-ray period (ms).....	Standard: 500 (500, 1000, 1500, 2000, 2500, 3000, 3500, 4000)
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Product Components and Interface

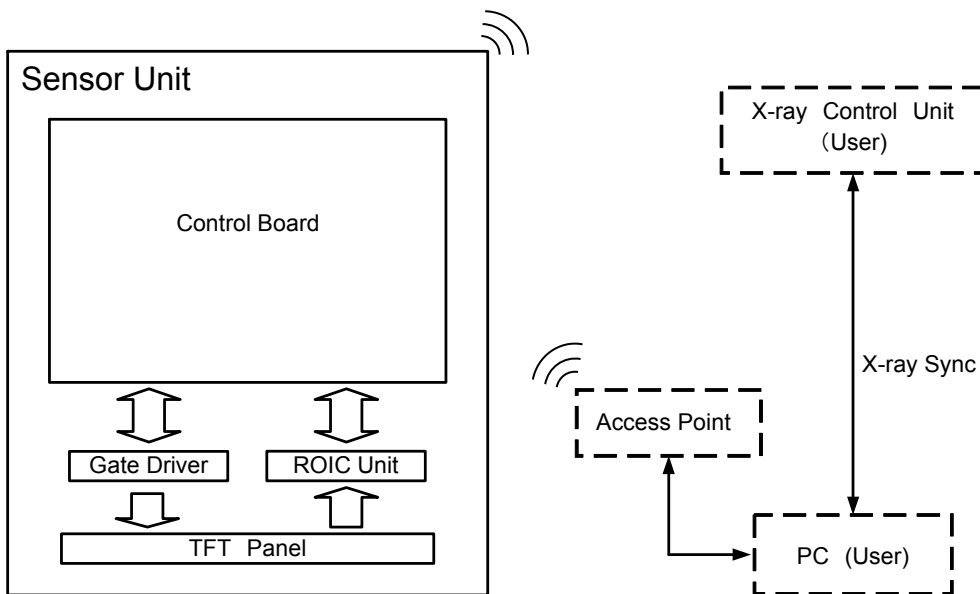
(1) Tethered Mode



Note:

Do not disconnect Ethernet connection while DC16V is operating and supplying to Sensor Unit.

(2) Wireless Mode

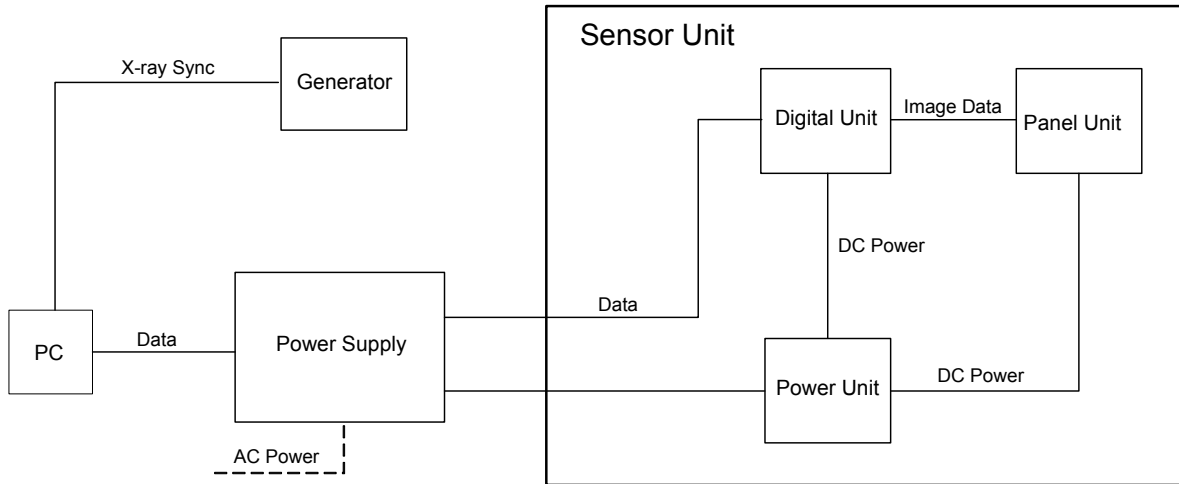


LED Display Mode:

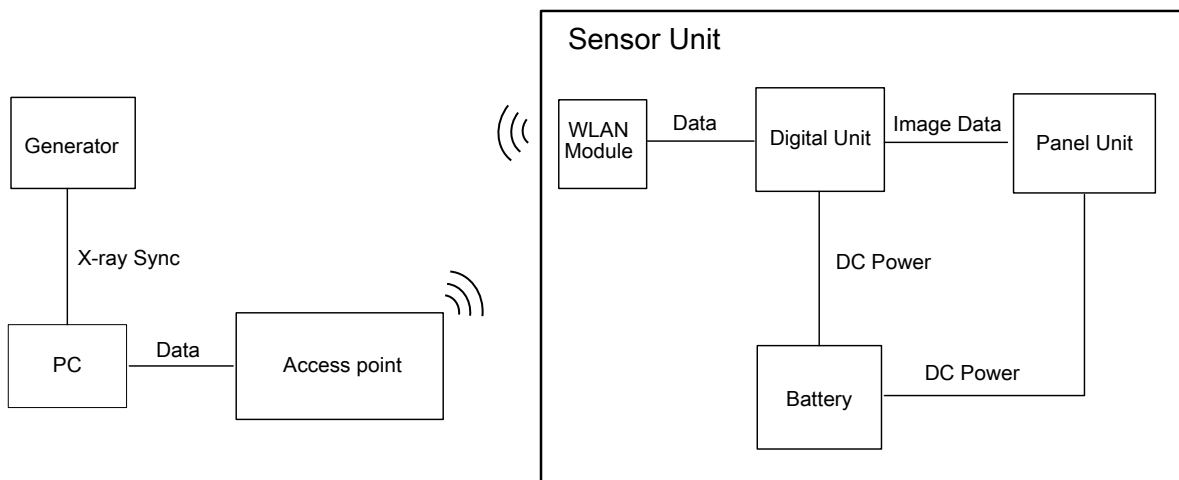
Name	Status
PWR	Turn on when power on
BUSY	Flash on when internal processing
LINK	Turn on when connect Green (WLAN) / Blue (LAN)

Image Acquisition Communication Block Diagram

(1) Tethered Mode

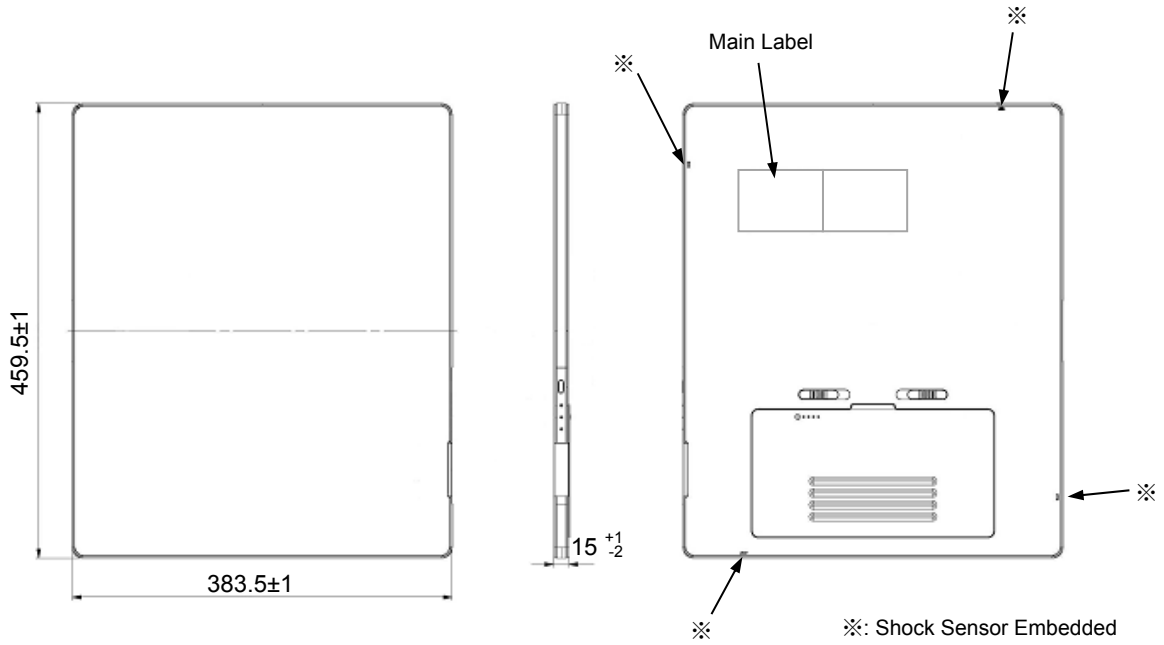


(2) Wireless Mode



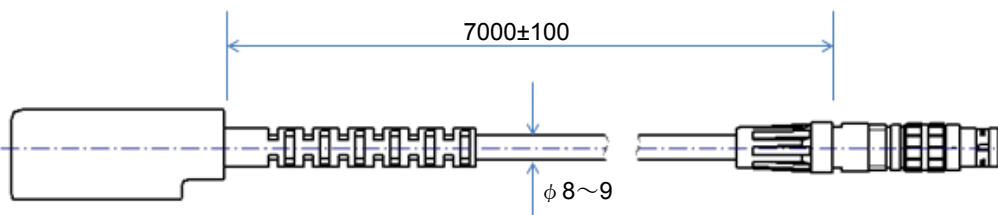
DIMENSIONAL OUTLINE
(Sensor Unit)

Unit: mm



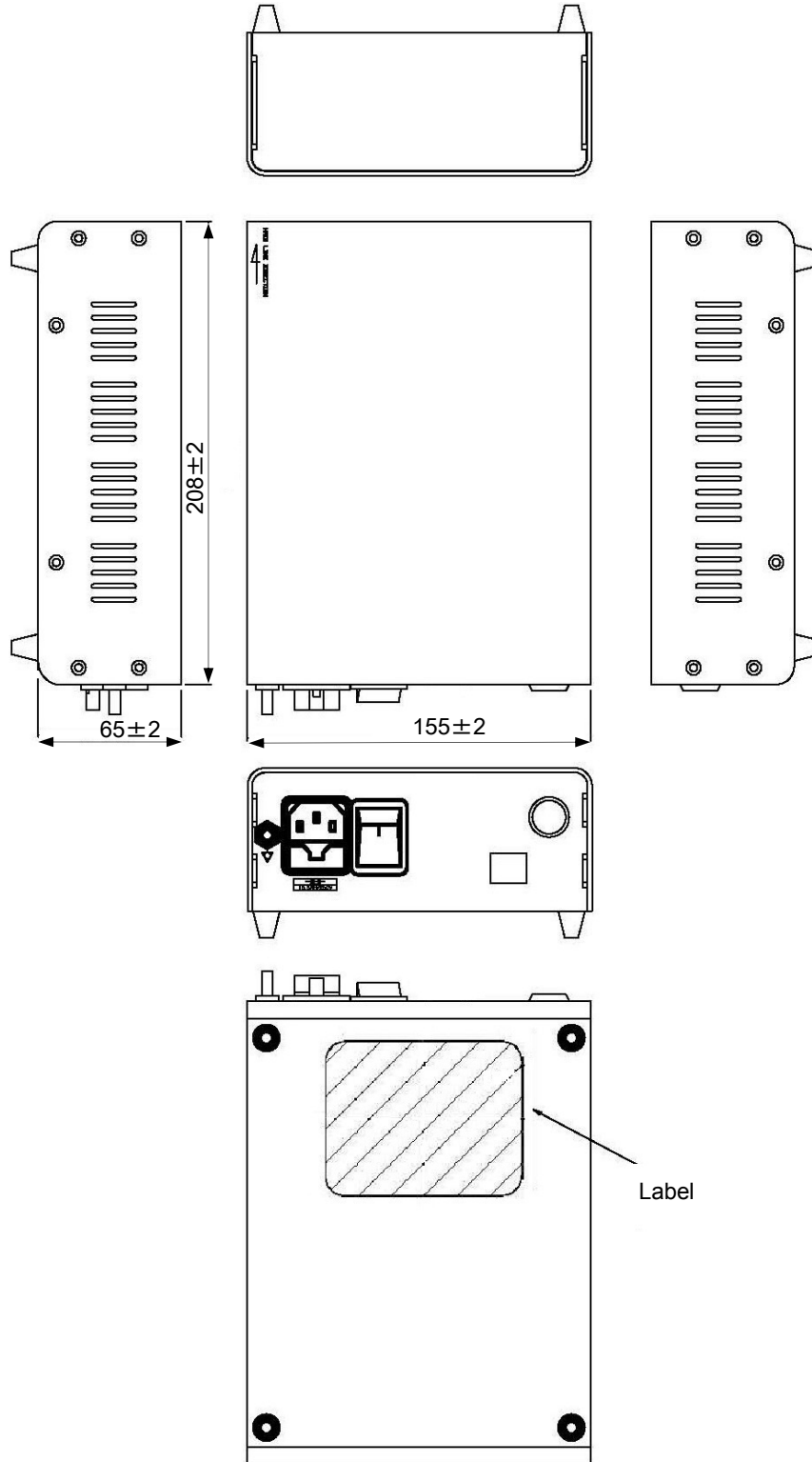
(Main Cable)

Unit: mm



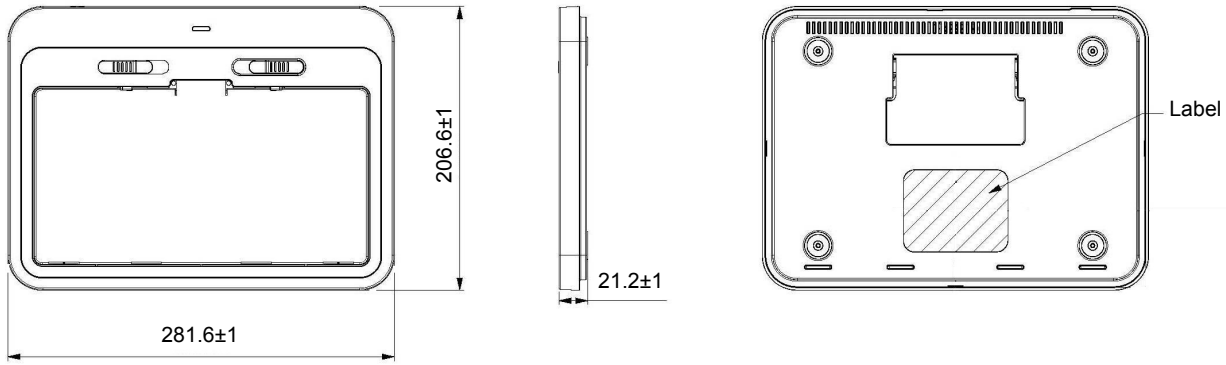
DIMENSIONAL OUTLINE
(Power Supply)

Unit: mm



**DIMENSIONAL OUTLINE
(Battery Recharger)**

Unit: mm



(AC Adapter)

Unit: mm

