

X-Ray FLAT PANEL IMAGER

FDXA4343R-HD

**Active Area: 426(H) × 425(V) mm
(16.8" × 16.7")**

FEATURING:

- High DQE
- High Contrast
- Short Cycle time
- Mounted with AED

– High DQE and High Contrast CsI Phosphor Screen –

CETD has long experience to develop and manufacture fine and thick pillar structure of CsI phosphor screen with high DQE and high sensitivity.

– Low Noise ROIC and Analog Circuit –

ROIC and analog circuit are designed and specified to be suitable for high sensitivity X-ray conversion layer.

INTENDED USE:

FDXA4343R-HD 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. This unit is not intended to be transferrable. Install it permanently at a specific location, or it shall not be removable without the use of tools.

COMPONENTS AND CHARACTERISTICS

Flat Panel Sensor Unit:

Sensor Protection Plate Carbon Fiber Plate
 Cooling Natural Air Cooling
 Power Consumption Maximum 15W
 Overall Dimensions 459.5 × 459.5 × 15.8mm (W(H) × D(V) × H)
 Weight 4.5kg (approx.)

Interface Box:

Input AC100-240V, 50/60Hz
 Output DC24V 1.3A 30W(MAX)
 Overall Dimensions 280 × 100 × 50mm (W(H) × D(V) × H)
 Weight 1.1kg (approx.)

Surrounding conditions:

	Environmental conditions for storage and transport (See remarks.)	Environmental use conditions	Remarks
Temperature	-20 to 70°C	+10 to 35°C	<p style="text-align: center;"><u>Storage condition range</u></p> <p>Humidity</p> <p style="text-align: right;">Temperature</p> <p>Caution</p> <ul style="list-style-type: none"> • Avoid dew condensation anytime, including during use, transport or storage. • Unpack the product after it sufficiently fits into a new environment. • About 8 hours or more is required for environmental fitting.
Humidity	10 to 90% (No dew condensation allowed)	10 to 85% (No dew condensation allowed)	
Atmospheric pressure	50 to 106kPa	70 to 106kPa	—

Accessories:

Cables:

AC Cable 1.8m×1
 GND Cable 3m×1

Option Accessories:

DC Cable (Sensor Unit – Interface Box)

	Name	Length	Notes
1	ECB-F044A-R05/G	5m	Including connectors
2	ECB-F044A-R10/G	10m	Including connectors
3	ECB-F044A-R15/G	15m	Including connectors

* Please contact to our local sales for further information.

MAIN CHARACTERISTICS

Image Format:

X-ray Conversion Layer Cesium Iodide (CsI) with Amorphous Silicon (a-Si) Photodiode
Active Area 426(H) × 425(V)mm (16.8 × 16.7 inch)
Pixel Matrix 3040(H) × 3036(V)
Pixel Pitch 140µm
Cycle Time Shot to Shot (Single Exposure, EXP period 500msec) 6sec.

Performance:

Limiting Resolution 3.7Lp/mm typ.
MTF 36% typ. (2.0Lp/mm, 70kVp)
DQE (DQE (0)) 75% (Typ.)
A/D Conversion 16bit

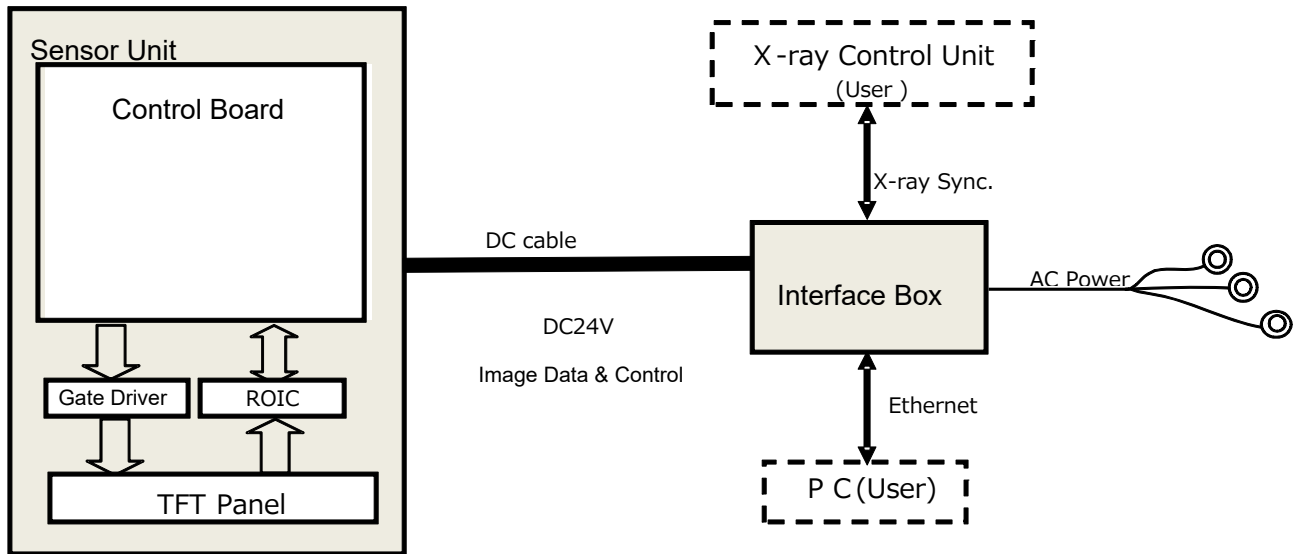
Ratings:

Energy Range 40-150kVp
Maximum Entrance Dose (Linear Output Range) 35µGy

Interface:

Data Output 16bit Digital Output Ethernet (1000BASE-T)
Command Control Ethernet (1000BASE-T)
X-ray Synchronization Control External
Power Input DC24V 1.3A (from Interface Box)

Product Components and Interface:



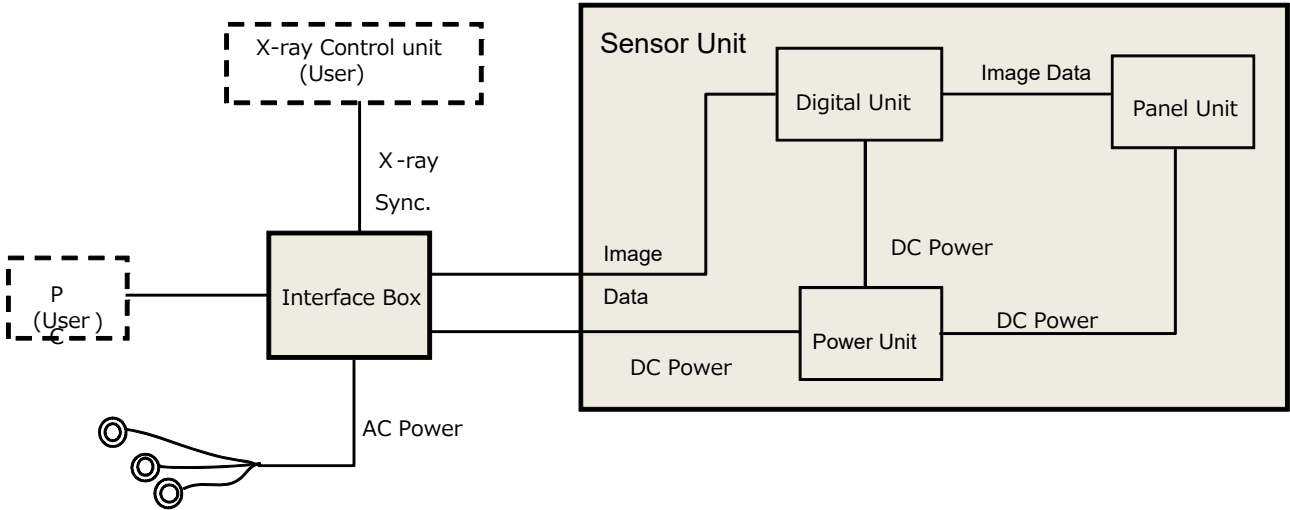
Note:

Do not disconnect Ethernet connection while DC24V is operating and supplying to Sensor Unit.

LED Display Mode:

Name	Status
PWR	Turn on when power on
LAN	Turn on when FPI system can communicate with Ethernet

Image Acquisition Communication Block Diagram:

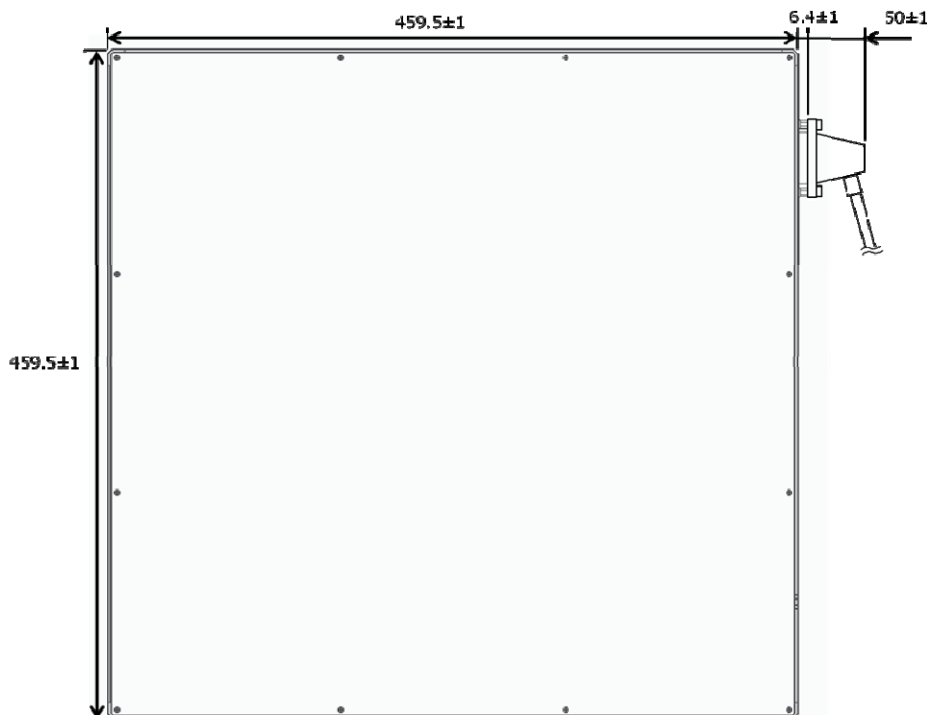
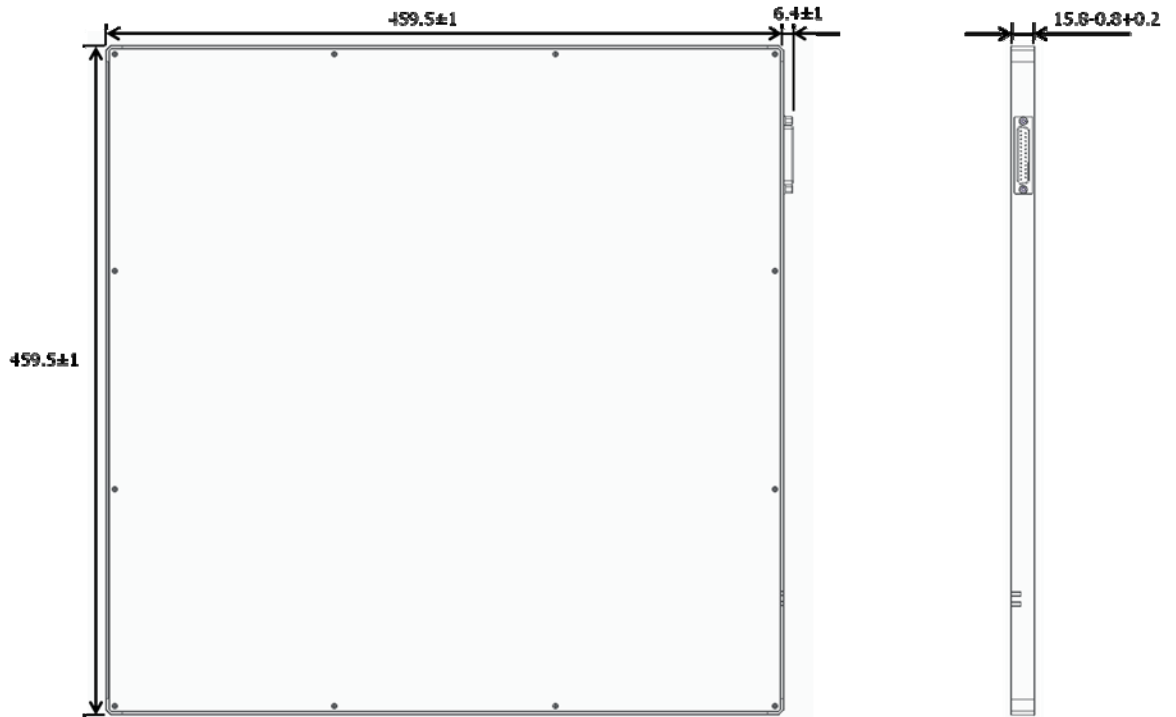


Communication Availability:

Signal Name	Type	Ethernet Command Control (PC)	D-Sub Signal Control (X-ray Controller)
EXP_REQ	INPUT	OK	OK
EXP_OK	OUTPUT	N.A	OK

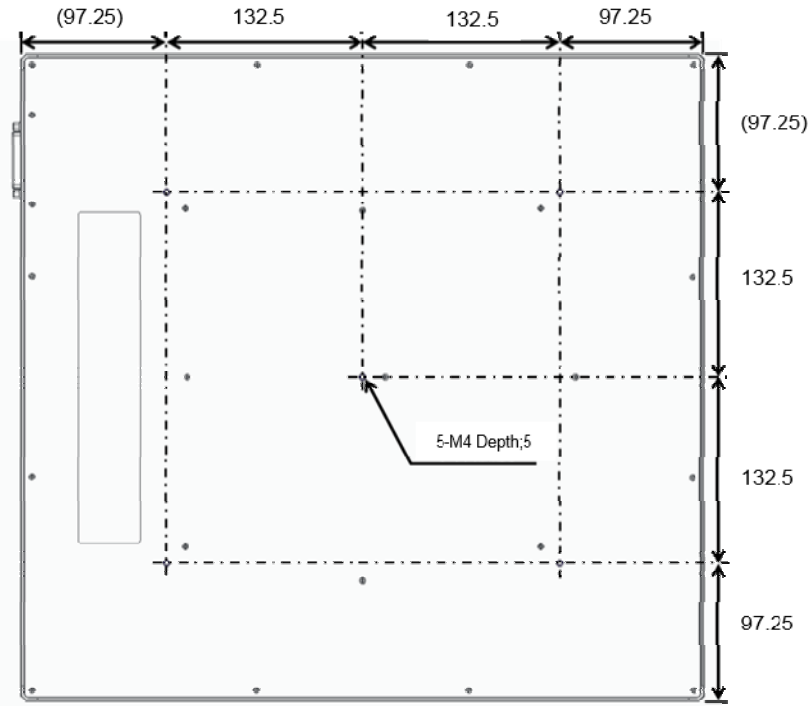
DIMENSIONAL OUTLINE
(Flat Panel Sensor Unit (X-ray input plate))

Unit: mm



DIMENSIONAL OUTLINE
(Flat Panel Sensor Unit (installation surface))

Unit: mm



**DIMENSIONAL OUTLINE
(Interface Box)**

Unit: mm

