X-Ray FLAT PANEL IMAGER
FDX4343R
Active Area: 430(H) × 439(V)mm
(16.9″ × 17.3″)

FEATURING:

- **High MTF**
- **High Sensitivity**
- **High Contrast**
- **Short Cycle Time**

– High Resolution and High DQE CsI Phosphor Screen –

CETD has long experience to develop and manufacture fine and thick pillar structure of CsI phosphor screen with high resolution 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:

FDX4343R 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

Flat Panel Sensor Unit:

Sensor Protection Plate ..... Carbon Fiber Plate
Cooling ..... Natural Air Cooling
Input ..... DC24V (from AC/DC Power Supply)
Power Consumption ..... Maximum 20W
Overall Dimensions ..... 512 × 495 × 43mm (W(H) × D(V) × (H))
Weight ..... 9kg (approx.)

Power Supply Unit:

Input AC100-240V, 50/60Hz
Output DC24V 1.3A 60W
Overall Dimensions ..... 126 × 200 × 60mm (W(H) × D(V) × (H))
Weight ..... 1kg (approx.)

Environmental:

	Under delivery and stock	Under operating
Temperature	-15 ~ 55℃	+10 ~ 35℃
Humidity	10 ~ 90% (Non-Condensing)	30 ~ 85% (Non-Condensing)
Pressure	50 ~ 106kPa	70 ~ 106kPa

Accessories:

Cables:
AC Cable ..... 1.8m×1
GND Cable ..... 3m×2

Option Accessories:

DC Cable (Sensor Unit - Power Supply Unit)

	Name	Length	Notes
1	ECB-F002A-04/G	0.4m	Including connectors
2	ECB-F002A/G	2m	-
3	ECB-F002A-5/G	5m	-
4	ECB-F002A-10/G	10m	-
5	ECB-F002A-20/G	20m	-

* 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 ..... 430(H) × 439(V)mm (16.9 × 17.3 inch)
Pixel Matrix ..... 3008(H) × 3072(V)
Pixel Pitch 143μm
Cycle Time ..... Shot to Shot 6sec.

Performance:

Limiting Resolution ..... 3.7Lp/mm typ.
MTF (2.0 Lp/mm, 70 kVp, 1×1) ..... 36% typ.
DQE (DQE (0), Quantum - Limited) ..... > 70%
A/D Conversion 14bit

Ratings:

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

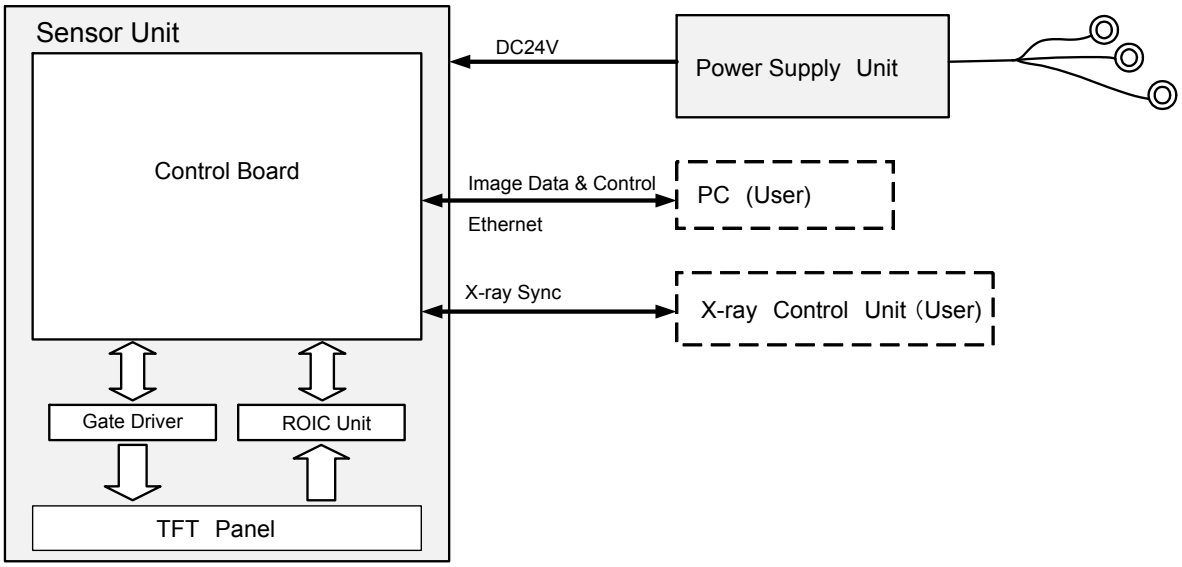
Interface:

Data Output ..... 16bit Digital Output Ethernet (1000BASE-T)
Command Control ..... Ethernet (1000BASE-T)
X-ray Synchronization Control ..... External
Power Input ..... DC24V 2A (from Power Supply Unit)

Image Acquisition Mode Table:

Mode	Frame rate (Frame/s)	Binning/Non-Binning	X-ray period (ms)
3072 lines Full Scan mode	1(approx.)	Non-binning	Standard: 500 (Variable between 50 to 500) Optional: 1000, 2300, 3200 or 4000

Product Components and Interface:



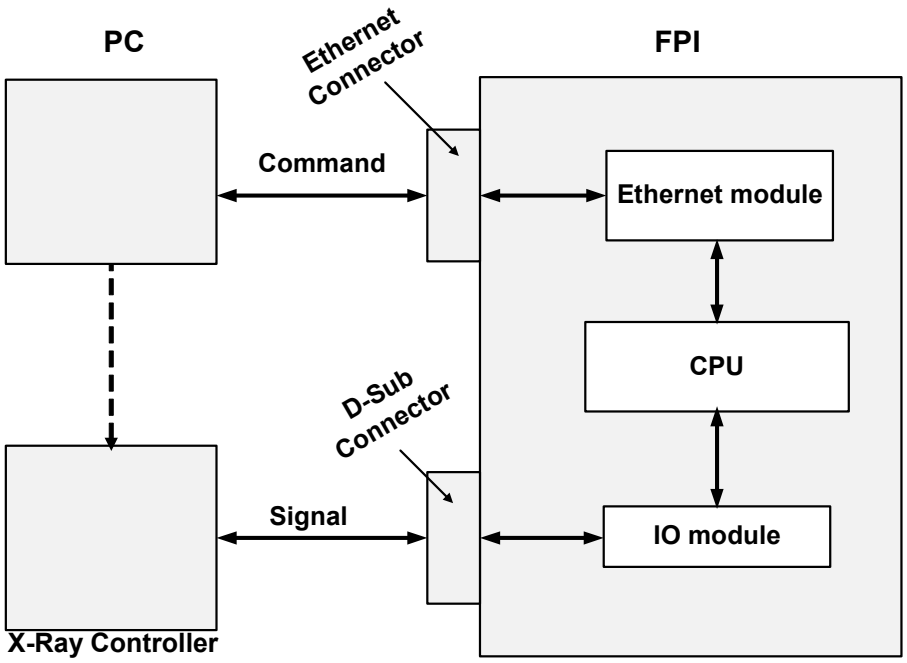
Note:

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

LED Display Mode:

Name	Status
Power	Turn on when power on
Healthy	Turn on when self check is good
Network	FPI system can communicate with PC
Imaging	Turn on when acquisition and flashing during data read

Image Acquisition Communication Block Diagram:



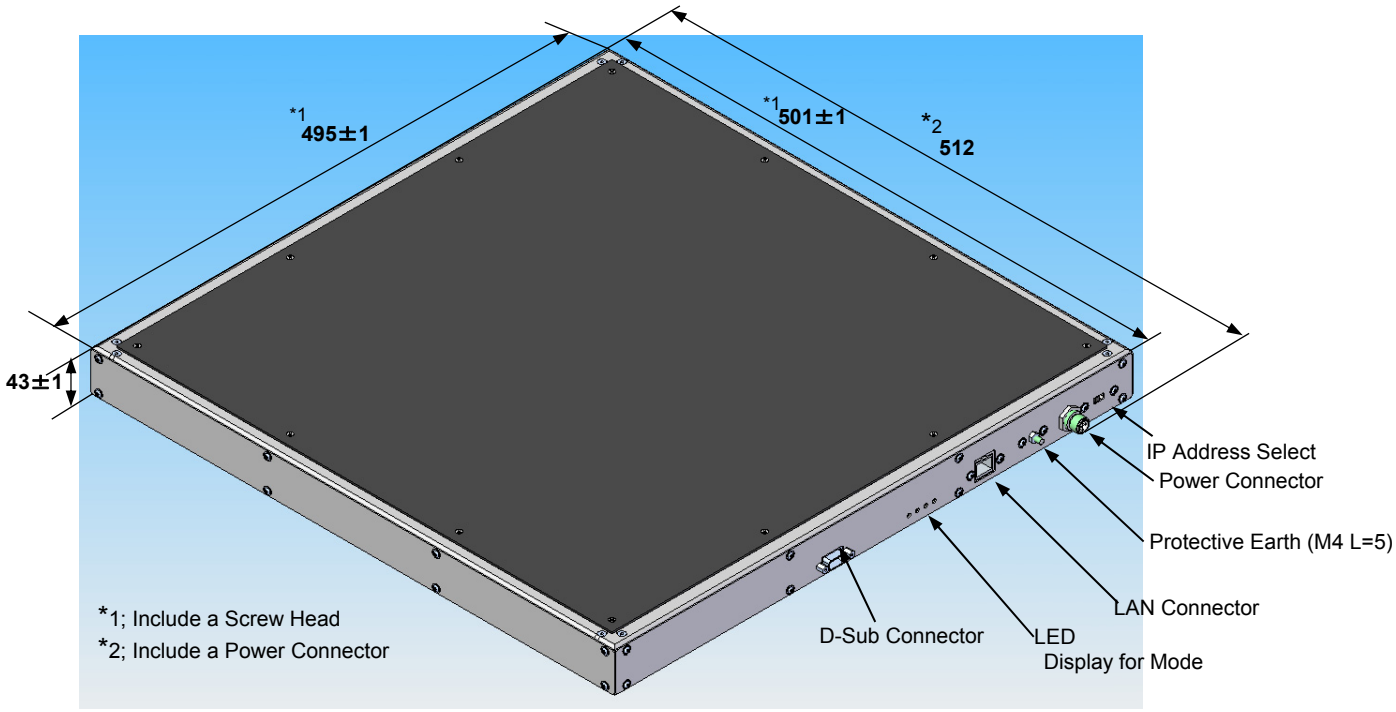
Communication Availability:

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

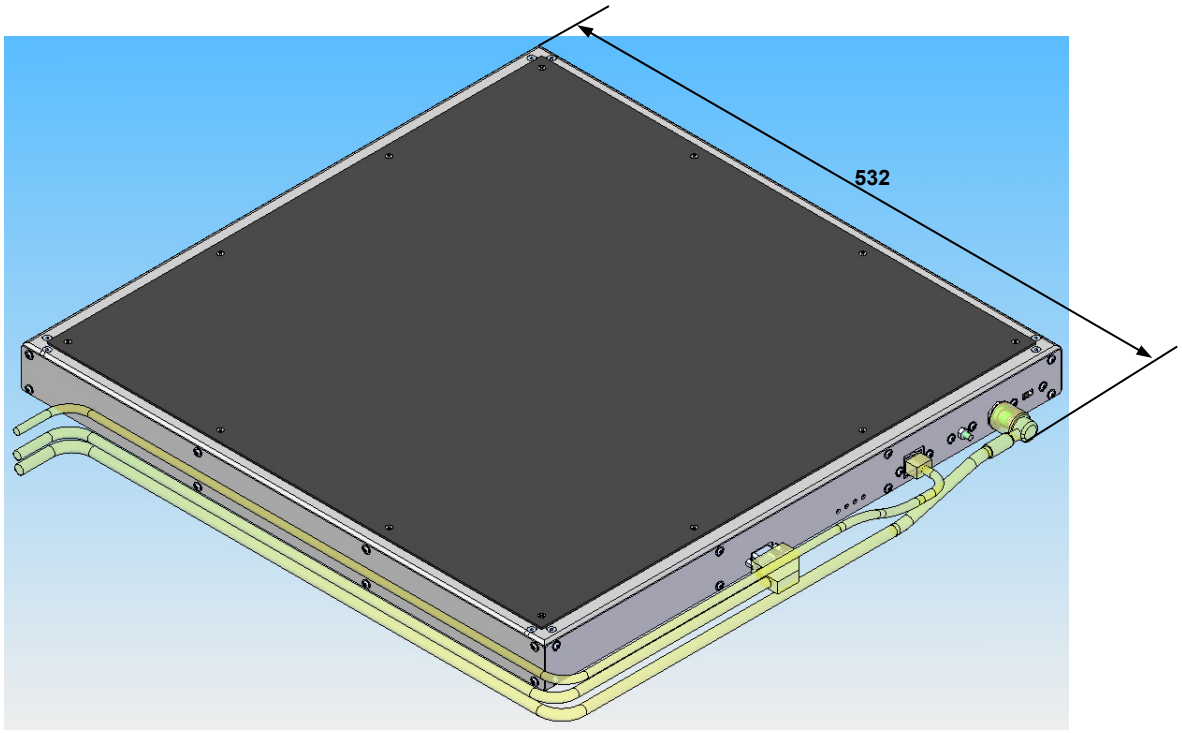
∗ EXP_REQ Command Response

DIMENSIONAL OUTLINE
(Flat Panel Sensor Unit)

Unit: mm

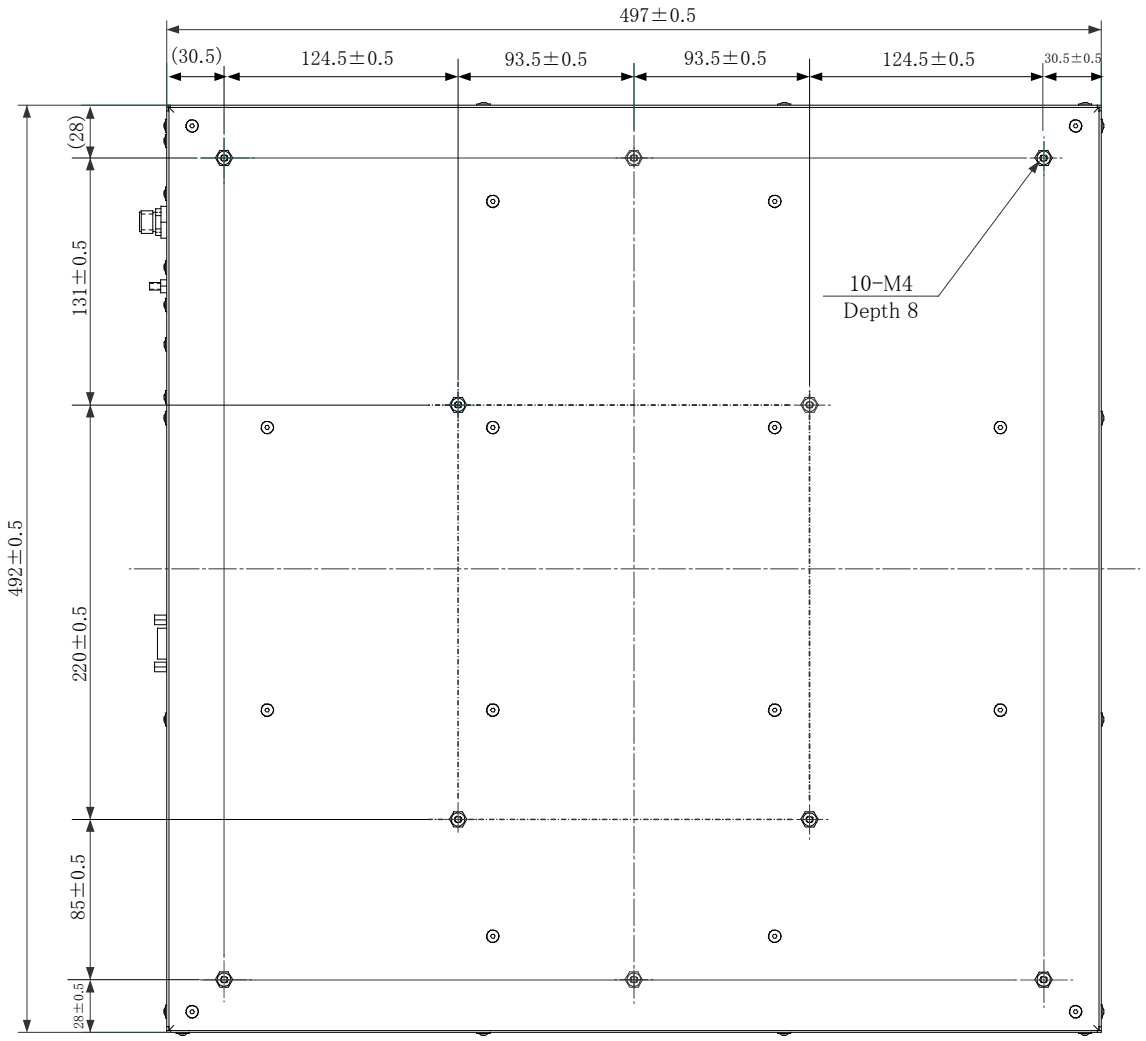


Wired Image



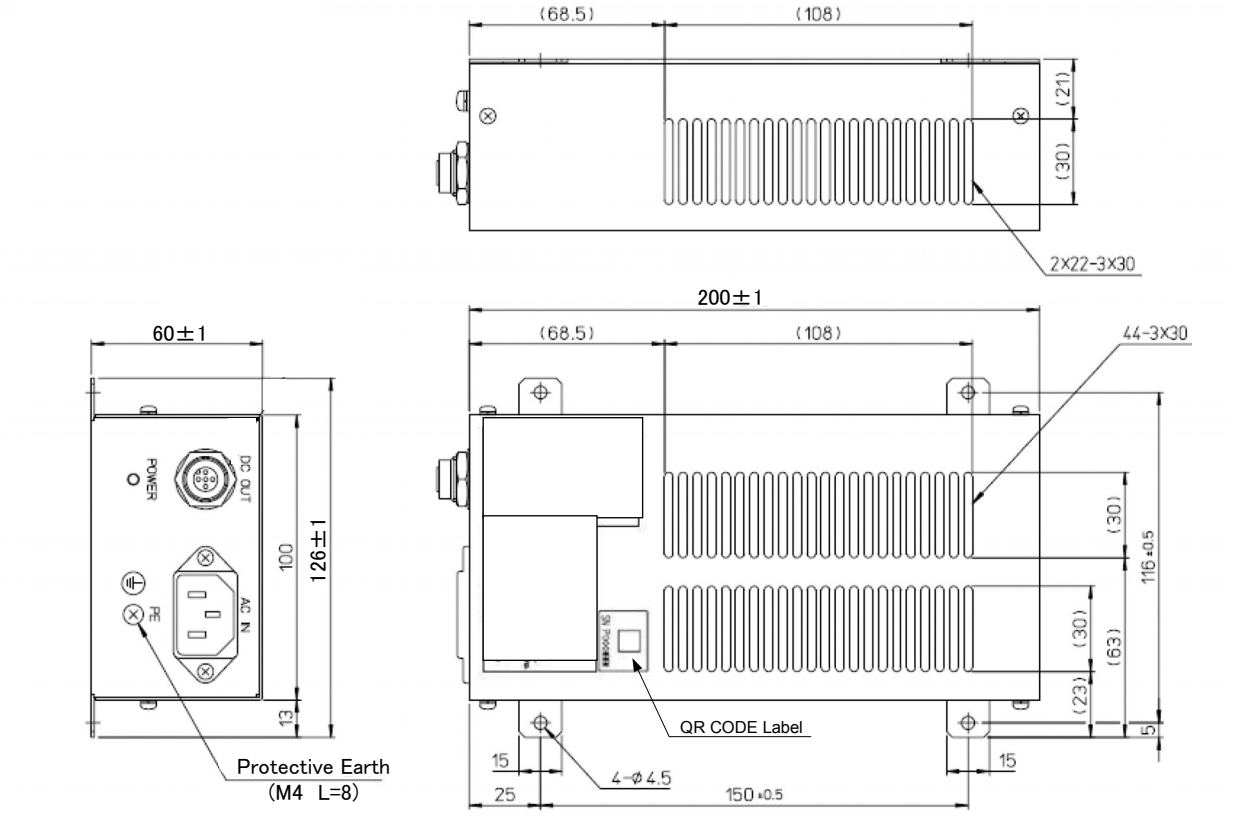
DIMENSIONAL OUTLINE
(Flat Panel Sensor Unit)

Unit: mm



DIMENSIONAL OUTLINE
(Power Supply Unit)

Unit: mm



CANON ELECTRON TUBES & DEVICES CO., LTD.
Marketing Engineering Group, Sales Department
1385, Shimoishigami, Otawara-shi, Tochigi 324-8550, Japan
Tel: +81-287-26-6666 Fax: +81-287-26-6060
https://etd.canon