

**X-Ray FLAT PANEL IMAGER  
FDXA4343R**

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

**FEATURING:**

- **High Resolution**
- **High Contrast**
- **Short Cycle time**
- **Mounted with AED**

**– High Resolution 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 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:**

FDXA4343R 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.

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★The information contained herein may be changed without prior notice. It is therefore, advisable to contact to CETD before processing with the design of equipment incorporating this product.

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## 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 ..... 4.3kg (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>Caution</p> <ul style="list-style-type: none"> <li>• Avoid dew condensation anytime, including during use, transport or storage.</li> <li>• Unpack the product after it sufficiently fits into a new environment.</li> <li>• About 8 hours or more is required for environmental fitting.</li> </ul> |
| Humidity             | 10 to 90%<br>(No dew condensation allowed)                        | 10 to 85%<br>(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 ..... 45% typ. (2.0Lp/mm, 70kVp)  
DQE (DQE (0)) ..... 56% (Typ.)  
A/D Conversion ..... 16bit

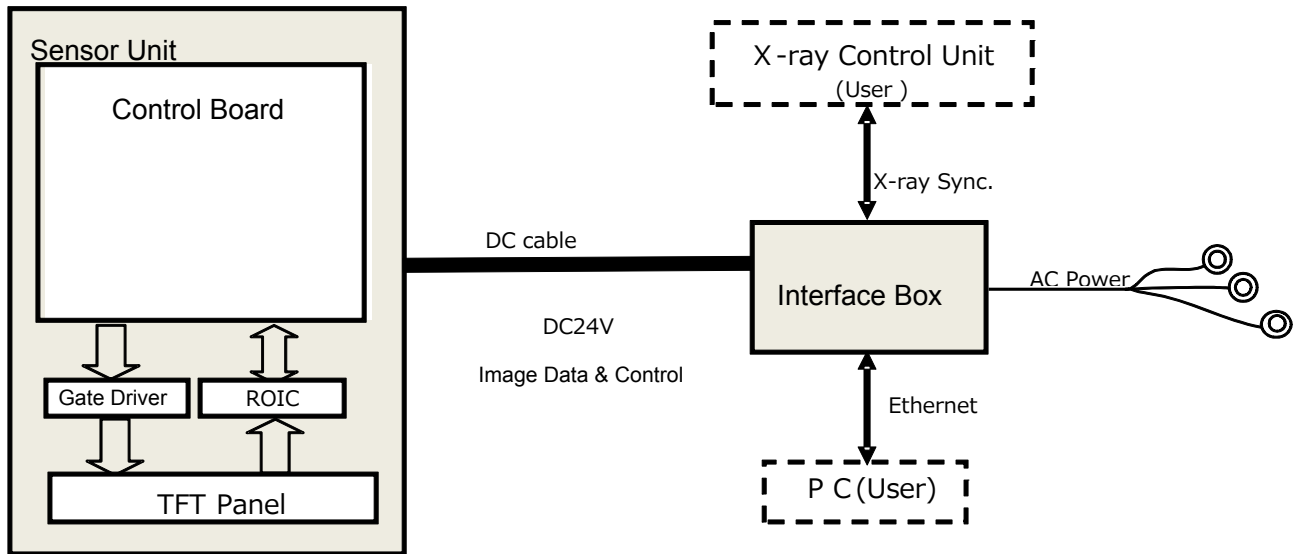
### Ratings:

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:**



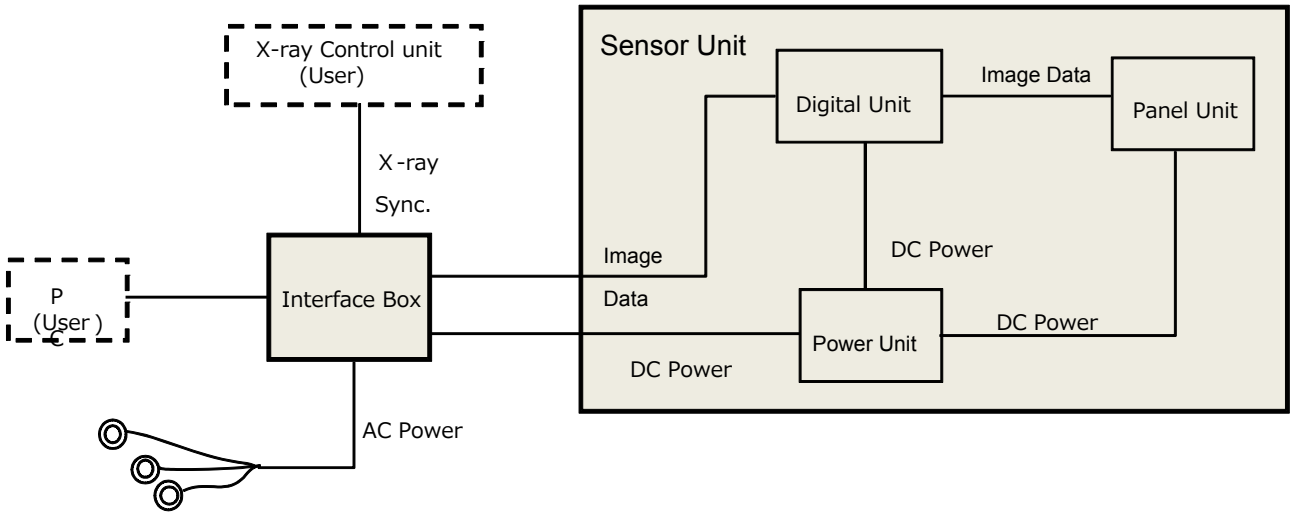
**Note:**

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:**

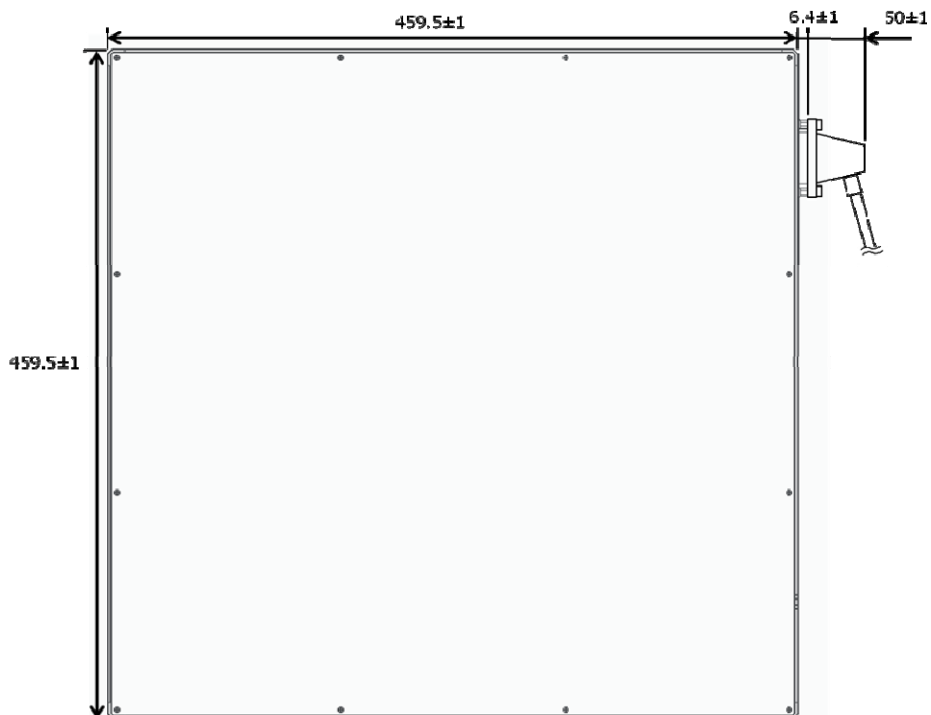
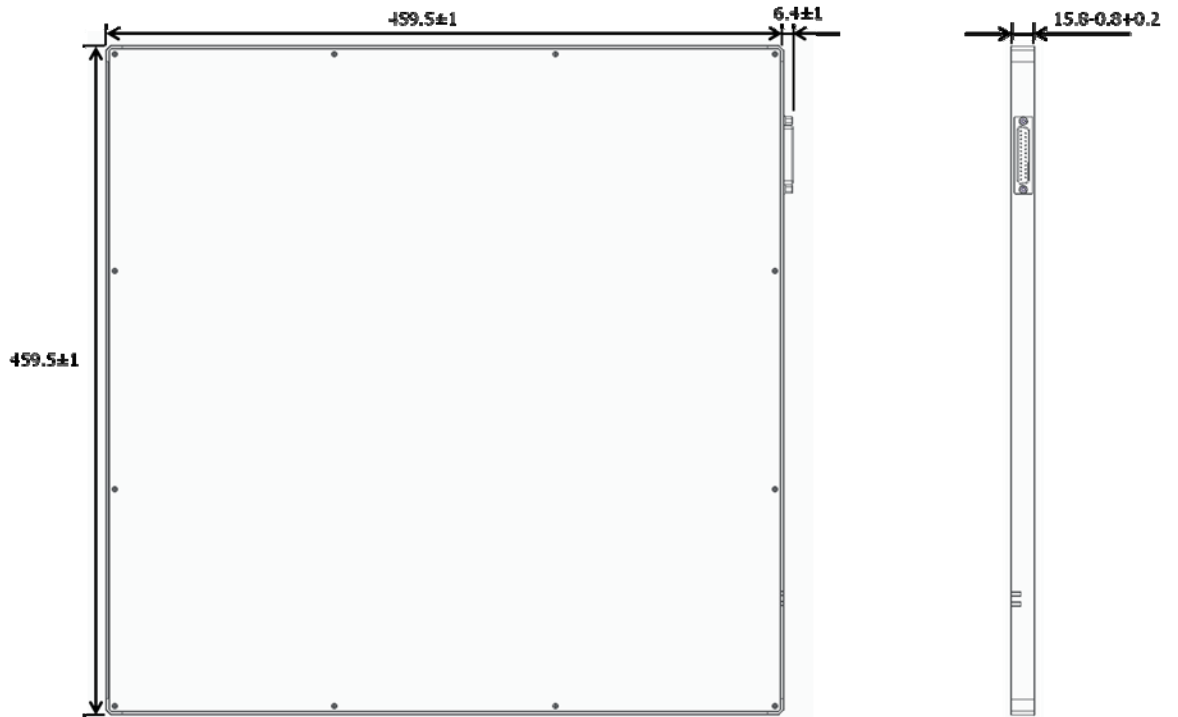


**Communication Availability:**

| 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                                      |

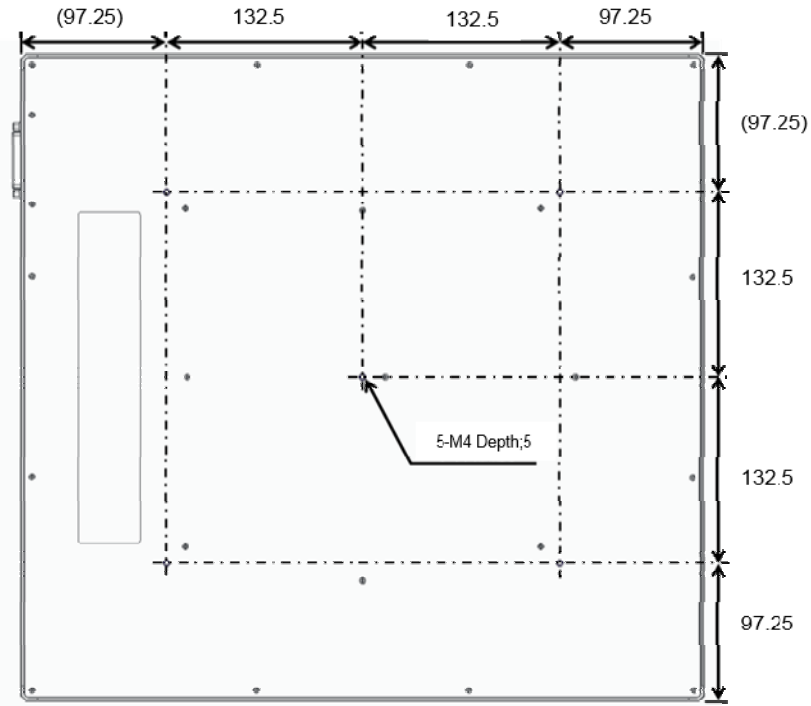
**DIMENSIONAL OUTLINE**  
**(Flat Panel Sensor Unit (X-ray input plate))**

Unit: mm



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

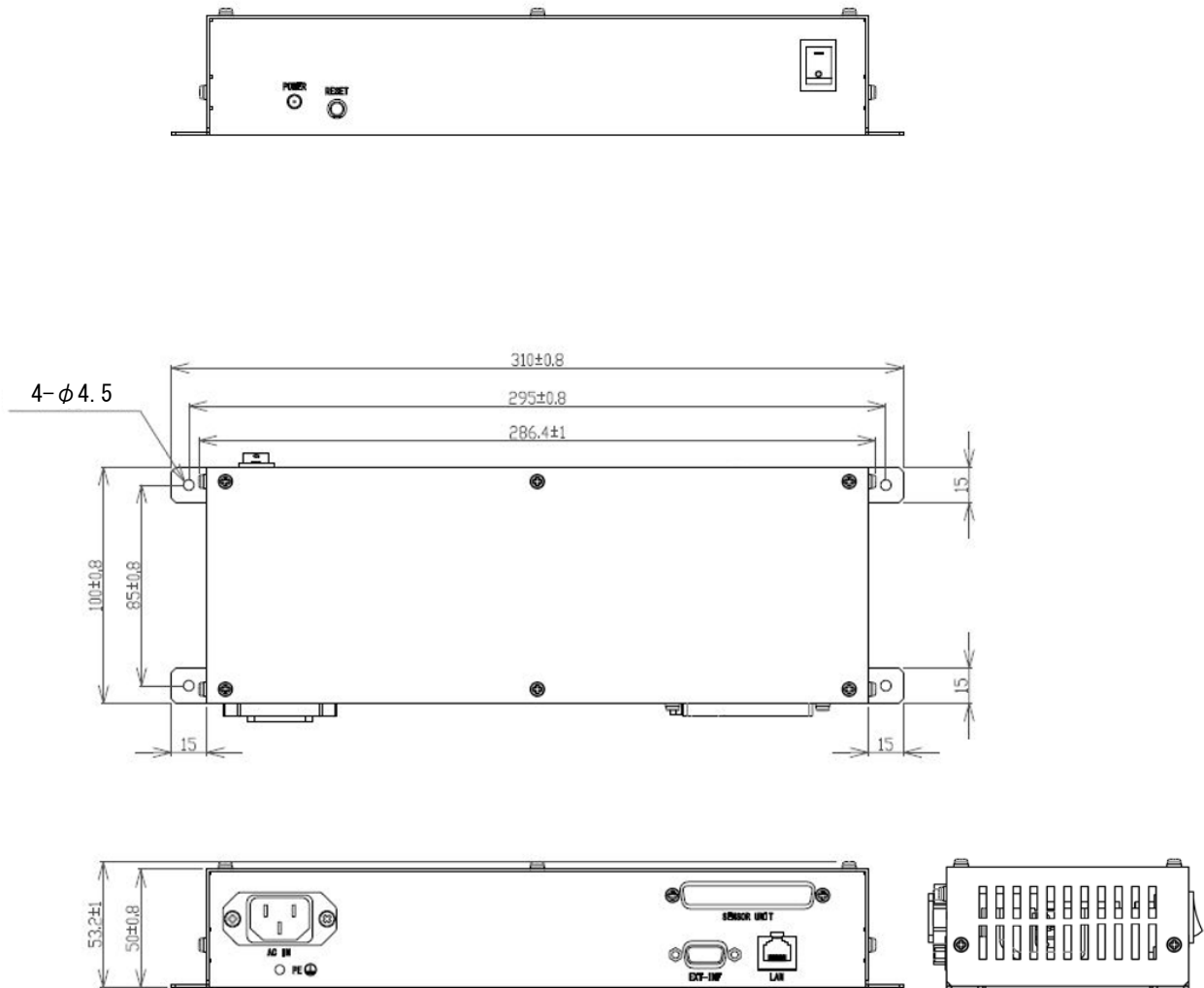
Unit: mm





**DIMENSIONAL OUTLINE  
(Interface Box)**

Unit: mm





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·The head office of Canon Electron Tubes & Devices Co., Ltd. has been certified to meet all the requirements of Environmental Management System ISO14001.  
·Canon Electron Tubes & Devices Co., Ltd. has been certified to meet all the requirements of Quality Management Systems ISO9001 and ISO13485.  
Product scope is referred to the following URL. <https://etd.canon/company/quality.htm>.