

**X-Ray FLAT PANEL IMAGER
FDX3334RF**

**Active Area: 330 (H) × 343 (V) mm
(13.0" × 13.5")**

FEATURING:

- **High MTF**
- **High Sensitivity**
- **High Contrast**
- **Real Time Image Processing**

– 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:

FDX3334RF is an X-Ray FLAT PANEL IMAGER for fluoroscopic and 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.

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COMPONENTS AND CHARACTERISTICS

Sensor Unit:

Sensor Protection Plate	Carbon Fiber Plate
Cooling Method	Air Cooling Fan
Power Consumption	52W
Overall Dimensions	435 × 426 × 106mm (W(H) × D(V) × H)
Weight	20kg

Control Unit:

Image Output	16bit Digital Output LC-Duplex Optical Fiber Connector
Command Control	Ethernet 100BASE-T TCP/IP Socket RJ-45 Connector
X-ray Synchronization Control	D-Sub 9pin Connector
Overall Dimensions	264 × 201 × 60mm (W(H) × D(V) × H)
Weight	Approx. 3kg

Power Unit:

Input	AC100-240V, 1-Phase 50/60Hz, 100VA
Output	DC24V 4A
Overall Dimensions	264 × 201 × 60mm (W(H) × D(V) × H)
Weight	Approx. 3kg

Environmental:

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

Accessories:

Optical Cables:

Sensor Unit - Control Unit	1 (SC Duplex-LC Duplex Optical Cable)
Control Unit - User Equipment	1 (LC Duplex Optical Cable)

Cables:

DC Cable (Sensor Unit - Control Unit)	1
DC Cable (Control Unit - Power Unit)	1
AC Cable	1
GND Cable (for Sensor Unit).....	1
GND Cable (for Control Unit)	1
GND Cable (for Power Unit).....	1
Spare fuse (250V 6.3A)	2

MAIN CHARACTERISTICS

Image Format:

X-ray Conversion Layer	Cesium Iodide (CsI) with Amorphous Silicon (a-Si) Photodiode
Active Area	330(H) × 343(V)mm (13.0 × 13.5inch)
Pixel Matrix	2304(H) × 2400(V)
Pixel Pitch	143μm
Pixel Read Out	Non-Binning (1×1) / Binning (2×2)
Partial Read Out	2400 / 1536 / 1024 / 512line read out
Maximum Frame Rate	30frame/sec (Binning, 1200line scan) 15frame/sec (Non-Binning, 2400line scan) 60frame/sec (Binning 512line scan) 60frame/sec (Non-Binning, 512line scan) (Refer "Image Acquisition Mode Table")
Maximum Entrance Dose (Low Gain)	4mR / frame

Performance:

Limiting Resolution	3.5Lp/mm typ. (15frame/sec, Non-Binning) 1.75Lp/mm typ. (30frame/sec, Binning)
MTF (2.0 Lp/mm, 70 kVp, Non-Binning)	33% or more
DQE (Non-Binning)	70% or more
Lag (1 frame, 15 frame/sec, Non-Binning)	10% or less
A/D Conversion	14bit

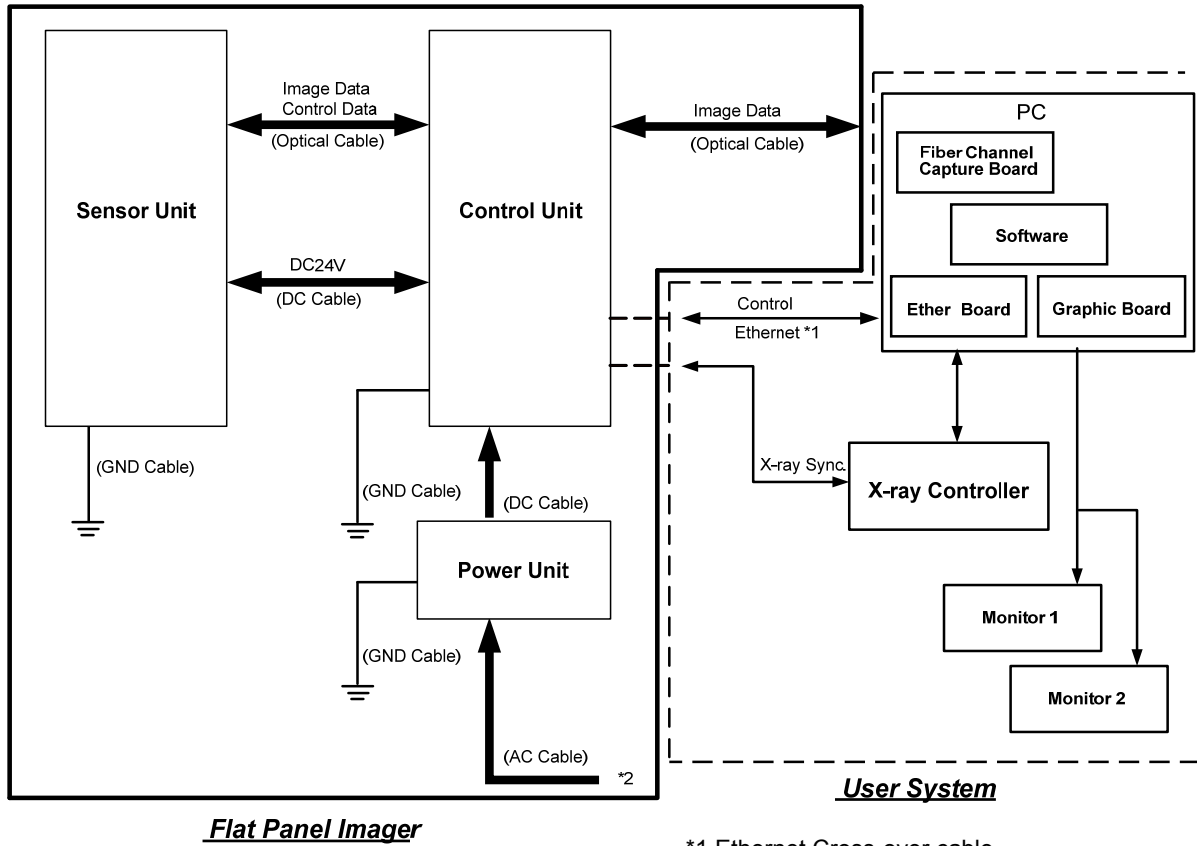
Absolute Maximum Rating:

X-ray Tube Voltage for fluoroscopy	125kVp
Minimum Distance between X-ray Entrance Plane and Focal Spot	73cm
Maximum Input X-ray Dose Rate	8.73×10^{-3} Gy/min [1R/min]

Interface:

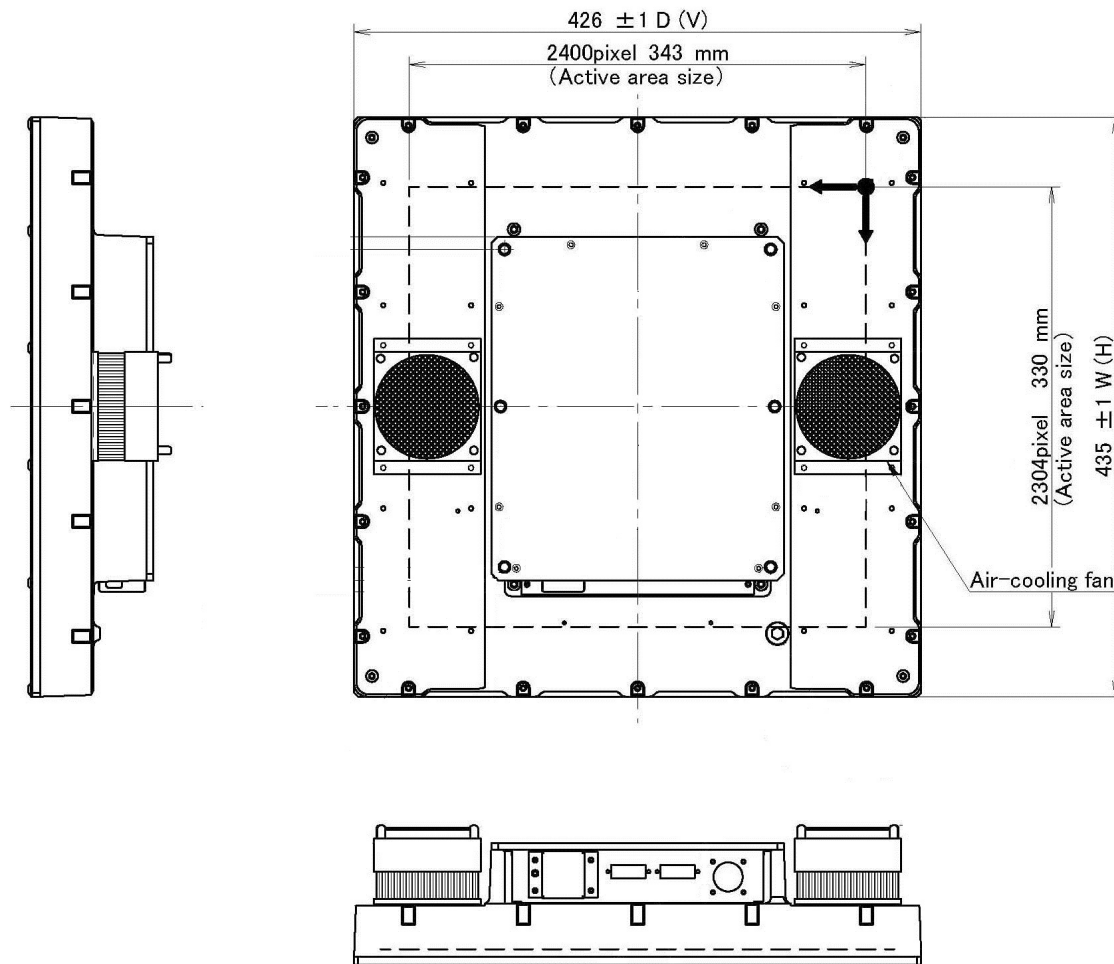
Optical Image Output;	
16bit Digital Data Output	LC-Duplex Optical fiber
Command Control	Ethernet 100BASE-TX
X-ray Synchronization Control	Signal level, opt-isolated

PRODUCT COMPONENTS AND INTERFACE



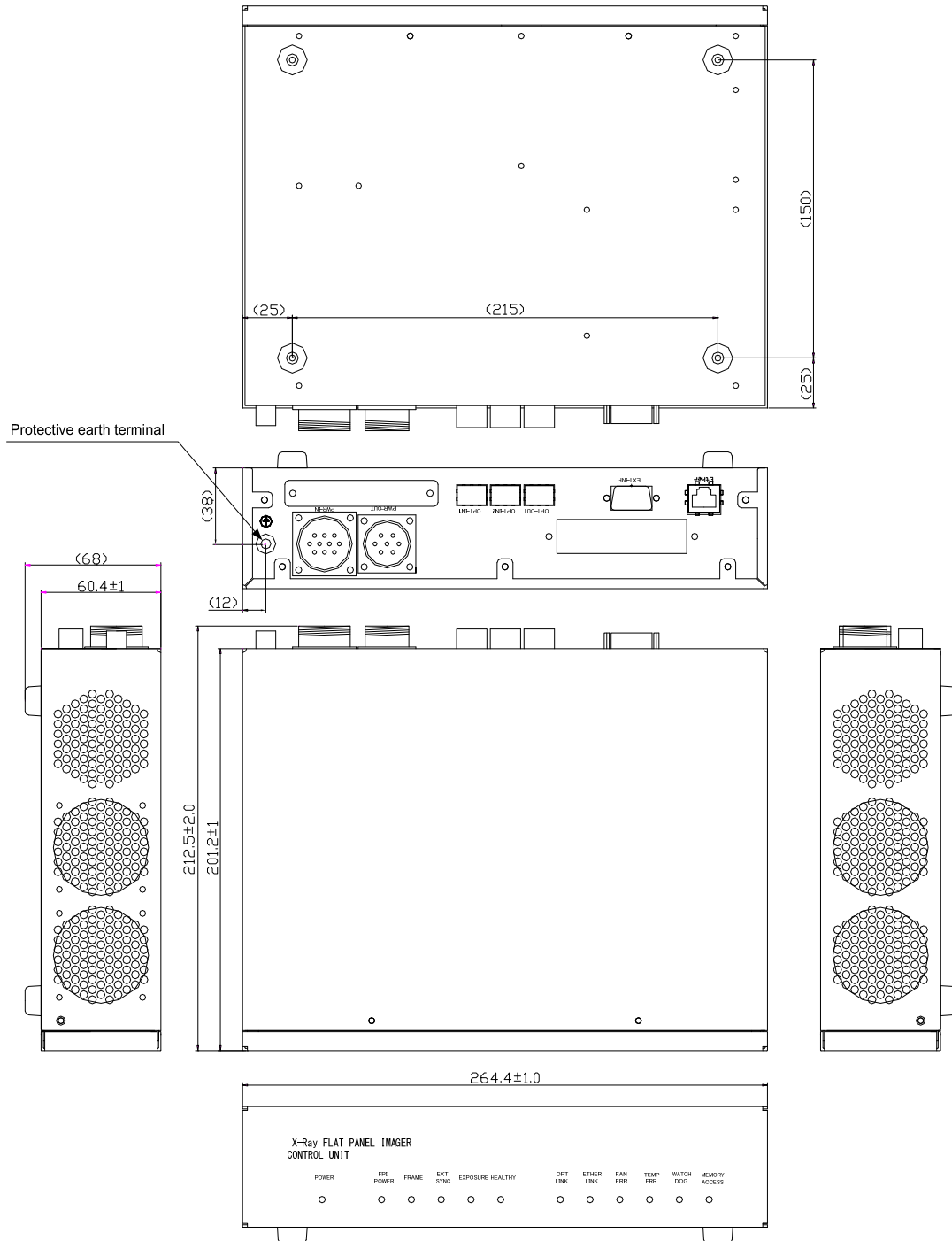
DIMENSIONAL OUTLINE
(Sensor Unit)

Unit: mm



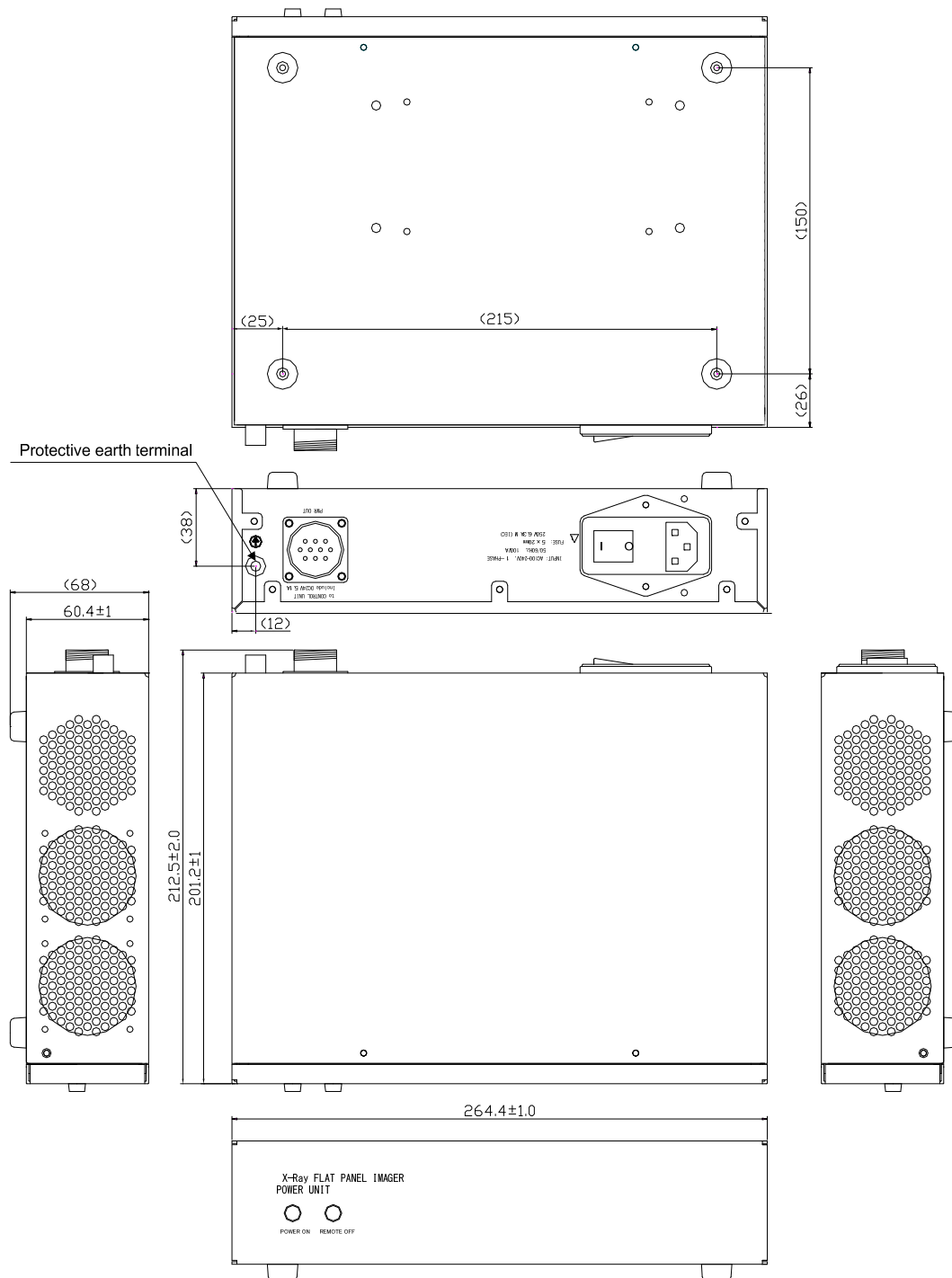
DIMENSIONAL OUTLINE (Control Unit)

Unit: mm



**DIMENSIONAL OUTLINE
(Power Unit)**

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>.