

"SD Series I.I."
X-ray Image Intensifier
E5796SD-P2A
Triple Input Field:
310/230/160mm (12"/9"/6")
Output Image Diameter: 25mm

FEATURING:

- **High Resolution** : 46 Lp/cm
- **High Conversion Factor** : 34 $\frac{\text{cd/m}^2}{\mu\text{Gy/s}}$
- **High Contrast Ratio**
 - 10% area contrast** : 30
 - 10mm dia. contrast** : 18
- "SD Series I.I." E5796SD-P2A is used for medical radiographic diagnosis.
- This X-ray Image Intensifier is intended to be connected with IEC Class I equipment.

"SD Series I.I." E5796SD-P2A has been perfected by the integration of several aspects of advanced technology ;

The input window is of a thin metal plate, which has good X-ray transparency characteristics and reduces X-ray scatter.

It uses a thick input phosphor screen made with an extremely fine pillar shaped structure. This has high X-ray absorption and very high conversion efficiency. In addition, there is a thin output phosphor screen on a single thick-glass output window with an anti-reflective coating, offering very high contrast for small details, very low structure noise and high MTF characteristics.

The E5796SD-P2A, employing these manufacturing techniques, provides outstanding performance in resolution, brightness, contrast and noise.

The E5796SD-P2A is supplied in a housing, which provides mu-metal magnetic shielding and radiation shielding.

PERFORMANCE DATA

Item	N mode	M1 mode	M2 mode		
Central Resolution	46	50	56	Lp/cm	typ.
Conversion Factor (Gx)	34	-	-	(cd/m ²)/(μGy/s)	typ.
	300	-	-	(cd/m ²)/(mR/s)	typ.
Contrast Ratio	10% area	30	-	-	typ.
	10 mm dia.	18	-	-	typ.
DQE (IEC standard)	65	-	-	%	typ.

GENERAL DATA➤ **MECHANICAL:**

Item	
Overall Length	434.5±5 mm
Maximum Diameter	380±2 mm
Nominal Entrance Field Size	
N (12") mode	310 mm min.
M1 (9") mode	230±5 mm
M2 (6") mode	160±5 mm
Output Image Diameter	25±0.5 mm
Weight (approx.)	31 kg
Dimensional Outline	Refer to page 4

➤ **POWER SUPPLY:**

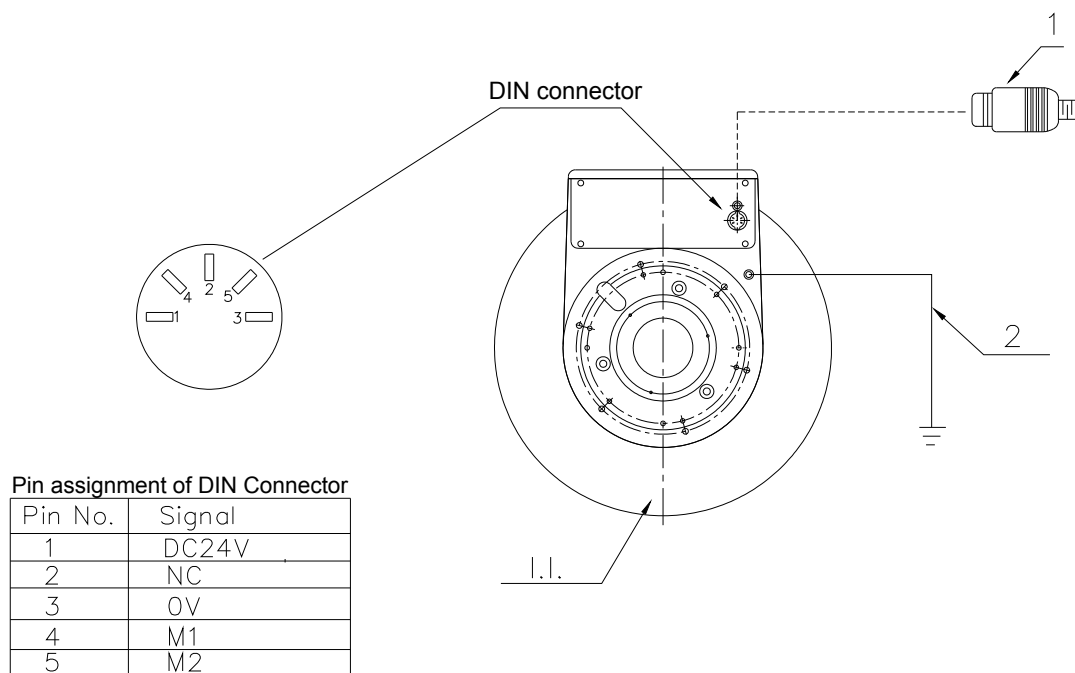
Item	
High Voltage Power Supply	
Input Voltage	24±1 Vdc

➤ **ENVIRONMENTAL:**

Item	Under delivery and stock	Under operating
Temperature	-15 to 45 °C	5 to 40 °C
Humidity	10 to 90 %	30 to 85 %
Pressure	50 to 106 kPa	70 to 106 kPa

ELECTRICAL WIRING AND CONNECTING

X-ray image intensifier is operated with 24Vdc input voltage applied to the high voltage power supply. Wiring and connecting are shown as follows.



* Switching of entrance field size

N mode 4, 5 Open

M1 mode 1-4 Close (apply DC24V to Pin No.4)

M2 mode 1-5 Close (apply DC24V to Pin No.5)

1. DIN connector one connector attached with each product
2. GND cable 3m×1

DIMENSIONAL OUTLINE

Unit: mm

