"SD Series I.I." X-ray Image Intensifier E5830SD-P4A

Triple Input Field: 230/160/120mm (9"/ 6"/ 4.5") Output Image Diameter: 25mm

FEATURING:

➤ High Resolution : 52 Lp/cm

cd/m²

 \rightarrow High Conversion Factor : 29 $\frac{G_{\text{min}}}{\mu \text{ Gy/s}}$

High Contrast Ratio

10% area contrast : 30:1 10mm dia. contrast : 19:1

- ➤ "SD Series I.I." E5830SD-P4A 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." E5830SD-P4A 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 E5830SD-P4A, employing these manufacturing techniques, provides outstanding performance in resolution, brightness, contrast and noise.

The E5830SD-P4A is supplied in a housing, which provides mu-metal magnetic shielding and radiation shielding.

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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.

PERFORMANCE DATA

Item		N mode	M1 mode	M2 mode		
Central Resolution		52	58	68	Lp/cm	typ.
Conversion Factor (Gx)		29	-	-	(cd/m ²)/(µGy/s)	typ.
		250	-	-	(cd/m ²)/(mR/s)	typ.
Contrast Ratio	10% area	30:1	-	-	-	typ.
	10 mm dia.	19:1	-	-	-	typ.
DQE (IEC standard)		65	-	-	%	typ.

GENERAL DATA

MECHANICAL:

WEST MAISTRE.				
Item				
Overall Length	338±5 mm			
Maximum Diameter	304±2 mm			
Nominal Entrance Field Size				
N (9") mode	230 mm min.			
Useful Entrance Field Size				
N (9") mode	215 mm min.			
M1 (6") mode	160±5 mm			
M2 (4.5") mode	120±5 mm			
Output Image Diameter	25±0.5 mm			
Weight (approx.)	20 kg			
Dimensional Outline	Refer to page 4			

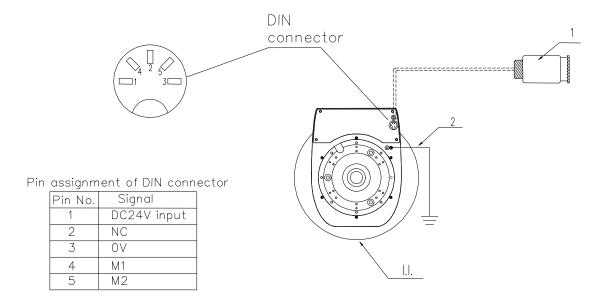
POWER SUPPLY:				
Item				
High Voltage Power Supply				
Input Voltage	24±1 Vdc			

> 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.



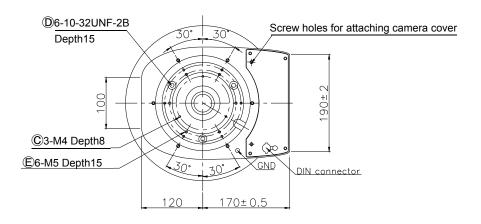
Switching of entrance field size

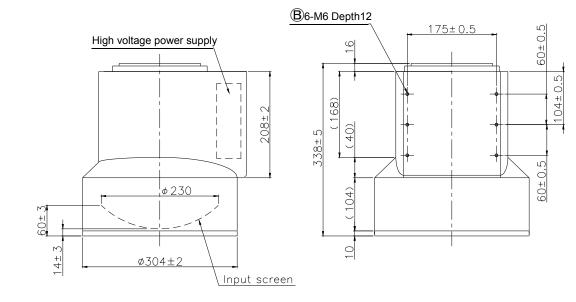
- * N mode4,5 Open
- * M1 mode.....1-4 Close (apply DC24V to Pin No.4)
- * M2 mode.....1-5 Close (apply DC24V to Pin No.5)

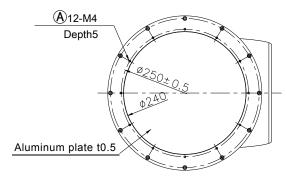
Τ.	DC IN	iput / iviode (unange	Connector.	 	 	X I
2:	GND	Cable			 	 	3mx1

DIMENSIONAL OUTLINE

Unit: mm







- (A)B:Screw holes for fixing to apparatus
- ©DE:Screw holes for attaching objection lens