



Surgical Mobile C-Arm ZEN-Series

Specification		Model			
		ZEN-2090 PRO	ZEN-5000		ZEN-7000
Illustration					
X-RAY GENERATOR	1) Type	HF Inverter (40kHz)	HF Inverter (40kHz)		HF Inverter (60kHz)
	2) Power output	2.2kW	3.2KW		15kW
	3) Fluoroscopic mode				
	(1) ABC (Auto Brightness Control)	Yes	Yes		Yes
	(2) Continuous Mode				
	Low ; kV range <Step>	40~110 < 1 >	40~110 < 1 >		40~120 < 1 >
	; mA range <Step>	0.2~6.0 <0.1>	0.2~6.0 <0.1>		0.2~6.0 <0.1>
	High ; kV range <Step>	-	-		40~120 <1>
	; mA range <Step>	-	-		1.0~20.0 <0.1>
	(3) Pulsed mode				
	Low ; kV range <Step>	40~110 < 1 >	40~110 < 1 >		40~120 <1>
	; mA range <Step>	0.2~6.0 <0.1>	1.0~6.0 <0.1>		1.0~10.0 <0.1>
	; Frame rate	10 fps	15 fps		30, 15 fps
	High ; kV range <Step>	-	-		40~120 <1>
	; mA range <Step>	-	-		10.0~20.0 <0.1>
	; Frame rate	-	-		30, 15 fps
	(4) Snapshot(Fine View) Mode	1~20mA	1~20mA		1~50mA
X-RAY TUBE	4) Radiographic mode				
	(1) kV range <Step>	40~110 < 1 >	40~110 < 1 >		40~120 <1>
	(2) mA range	20 (fixed)	20mA~32mA		20mA~150mA
	(3) mAs range	0.4~100	1~100		0.4~100
	5) Generator's heat unit (HU)	665,280	1,034,880		1,209,600
	6) Housing heat cooling rate (W)	60 (5,085 HU/min)	60 (5,085 HU/min)		75 (6,356 HU/min)
Collimator	1) Anode type	Stationary	Stationary		Rotating
	2) Anode heat capacity (HU)	50,000 (35.5kJ)	50,000 (35.5kJ)		304,054 (225kJ)
	3) Anode heat cooling rate (W)	600 (50,700 HU/min)	600 (50,700 HU/min)		750 (63,375 HU/min)
	4) Max kVp	110	110		130
	5) Focal spot (mm)	0.5/ 1.5	0.5/ 1.5		0.3/ 0.6
	6) Total filtration (mmAl)	2.8 (Inherent : 0.8, Additional : 2.0)	2.8 (Inherent : 0.8, Additional : 2.0)		3.7 (Inherent : 0.7, Additional : 3.0)
Image Intensifier	1) Collimation shape	Circle(Rectangle/Iris option)	Iris (Octagonal)		Iris (Octagonal)
	2) Composition	1 Unit : Shutter	2 Unit : Iris + Shutter		2 Unit : Iris + Shutter
	3) Shutter	No	Asymmetric		Asymmetric
	4) Rotation	No	180 °		180 °
	5) Virtual collimator	No	Yes (on OP)		Yes (on OP)
TV Camera	1) Input field view size (")	9" (Φ230mm)	9" (Φ230mm) 12" (Φ305mm)		9" (Φ230mm) 12" (Φ305mm)
	2) Nominal entrance field size (")	9/ 6/ 4.5	12/ 9/ 6		12/ 9/ 6
	3) Central Resolution (lp/cm)	52/58/68	46/50/56		52/58/68
	4) Contrast Ratio(10%)	30 : 1	30:01:00		30 : 1
	5) Cassette holder size (")	10 * 12	10 * 12		10 * 12
Dimensions	1) Type	CCD	CCD		CCD
	2) Scan lines (Hz) or Pixel size	1024*1024	1024*1024		1024*1024
	3) Specific function				
	(1) Shading compensation	Yes	Yes		Yes
	(2) Edge enhancement	Yes	Yes		Yes
	(3) Recursive filter	Yes	Yes		Yes
	(4) Image rotation	Yes	Yes		Yes
	(5) L/H(Last Image Hold)	Yes	Yes		Yes
	4) Monitor				
	(1) Type	TFT-LCD (Diagnostic B/W)	TFT-LCD (Diagnostic B/W)		TFT-LCD (Diagnostic B/W)
Others	(2) Size (Inch * Quantity)	19" * 2	19" * 2		19" * 2
	5) Length of monitor cable (m)	5	5		5
	1) SID (mm)	960	1,000		1000
	2) Free space (mm)	750	782 786		782 786
	3) Depth (mm)	640	723 733		723 733
	4) Horizontal travel (mm)	200	200		200
	5) Vertical travel (mm)	400	500		500
	6) Panning motion (°)	±12.5	±12.5		±12.5
	7) Pivot rotation (°)	±190 (Unlimited)	±190 (Limited)		±190 (Limited)
	8) Weight (Main Body+Monitor Cart)	235 kg	300 kg 320 kg		310kg 335 kg
Option	1) Operation panel	Tact switch	Touch Screen		Touch Screen
	2) Power requirements	Single Phase, AC 110/220V, 50/60Hz	Single Phase, AC 110/220V, 50/60Hz		Single Phase, AC 110/220V, 50/60Hz
	3) Clear cover	1 set	1 set		1 set
	4) Cassette holder	1 set	1 set		1 set
	5) Foot switch	1 set	1 set		1 set
	6) Hand switch	1 ea	1 ea		1 ea
Option	1) Laser aimer	Yes	Yes		Yes
	2) Dose area meter	Yes	Yes		Yes
	3) Hour meter	Basic	Basic		Basic
	4) DICOM solution	Basic	Basic		Basic
Option	5) DSA	No	Yes		Yes