

IXS1620

160 kV, 200 W



Multipurpose Sources

Applications

Medical Imaging, Security Inspections, Industrial NDT, Food Inspection, Quality Monitoring

Key Features

- Integrated High Voltage Generator, X-ray Tube, and Control Electronics
- Compact and Robust
- Wide Beam Angle
- Fast Rise time
- Radiation Shielded
- User Friendly RS232 Digital Interface

Specifications

Input Line Range	110-220 VAC±10%, 50/60 Hz
Output kV	30 - 160 kV
Output mA	0.2 - 8.0 mA
Output Power	200 W continuous Higher peak power with Duty Cycle
Voltage Regulation	Load: <0.1% at max kV output over the output mA range Line: <0.1% at max kV output over the input line range
Current Regulation	Load: <0.5% at max mA output over the output kV range Line: <0.5% at max mA output over the input line range
Ripple	kV: <0.5% p-p of maximum output mA: <0.5% p-p of maximum output
Repeatability	kV: <0.5% mA: <0.5%
Overshoot	kV: ≤5% of rated output
Output Rise Time	Rise Time ≤500 ms from 10%–90% of max rated output (Faster Rise time available upon Request)
Cooling	External Air Cooling required
Radiation shield	Less than 0.5 mR/hr at 5 cm from the surface of the chassis as per FDA 21 CFR 1020.40
Safety and Regulatory Compliances	Designed to meet CE, EN/UL61010-1 and EN61326-1



Fan Beam Generator with Intergrated air cooling

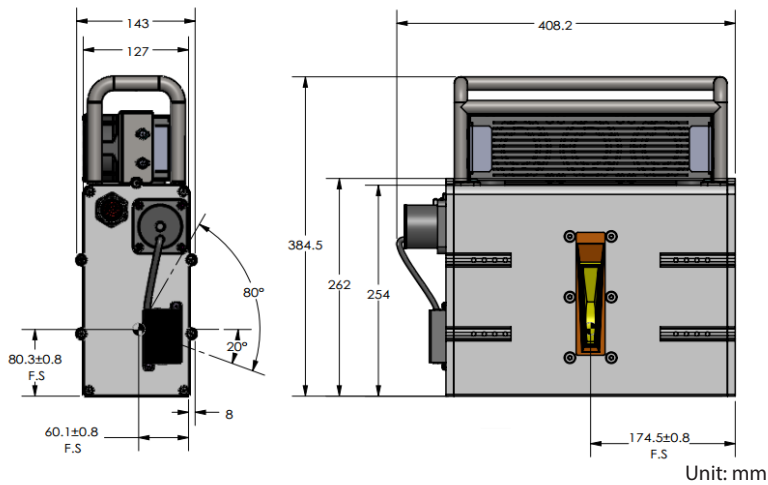


Control Unit

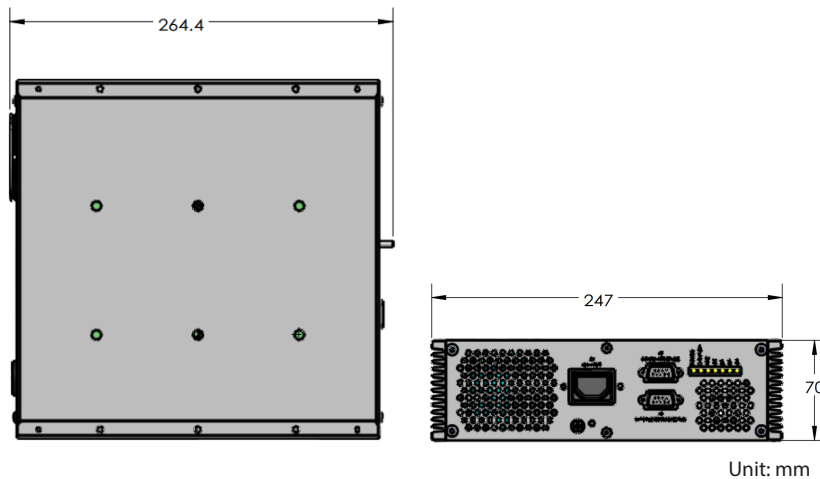
Dimensions	Generator: 409mm x 143mm x 385mm Control unit: 264mm x 247mm x 70mm (Smaller control unit for models ≤100kV)
Weight	Generator: 23 Kg Control unit: 3 Kg
X-ray Tube	
X-ray Tube Type	Glass
X-ray Focal Spot Size	0.8 nominal as per IEC60336 0.5 available upon request
Beam Port	Fan beam: 80° X 10° Cone beam: 30°, 40°
Operating Environment	
Operating Temperature	5°C to 40°C
Storage Temperature	-20°C to 85°C
Thermal Cut Off	60°C ± 3°C of oil temperature
Humidity	98% non-condensing



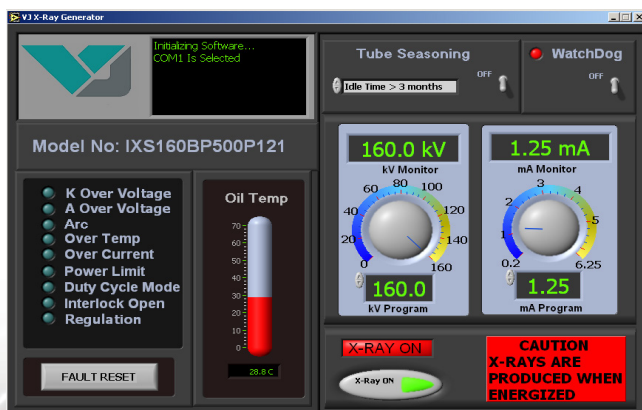
Generator



Control Unit



Graphical User Interface



LED Indicators

POWER	Illuminated when power is present
X-RAY ON	Illuminated when interlock is closed and HV is enabled
ARC	ARC-ing fault
OC	Over current fault
OT	Illuminated when oil temperature exceeds 60°C ± 3°C
OP	Illuminated when selected power exceeds the rated power
OV	Over voltage fault

J1: AC Input

N	Neutral
GND	Ground
L	110-220 VAC±10% Input

J2: RS232 Interface

Pin Out	Name
1	N/A
2	TX-(Transmit)
3	RX+(Received)
4	N/A
5	Signal Ground
6	N/A
7	N/A
8	N/A
9	N/A

J3: 24 VDC Pump/Fan

Pin Out	Name
+	+24 VDC
-	Return
+	+24 VDC
-	Return

J4: Interlock Connection/ X-ray On Relay

Pin Out	Name
1	Interlock out
2	Interlock in
3	X-ray On Relay contact common
4	X-ray On Relay contact N/C
5	X-ray On Relay contact N/O
6	N/A
7	N/A
8	N/A
9	N/A