

Integrated X-ray Source IXS1620

160 kV, 200 W



Multipurpose Generators Versatile, Compact, and Economical



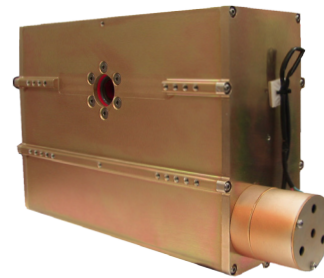
Applications

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
- Ethernet & Wifi (optional)

Input Line Range	115/230 VAC, 50/60 Hz
Output kV	25 - 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 ≤200 ms from 10%–90% of max rated output
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

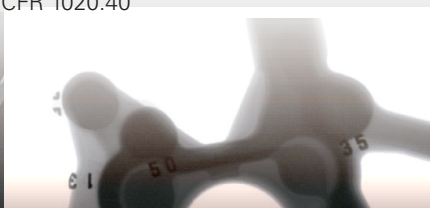


Generator shown with integrated Control Unit



Control Unit options:
160kV or 100kV

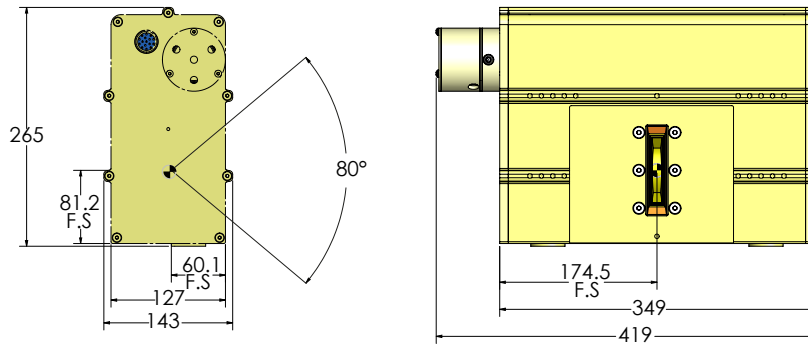
Safety and Regulatory Compliances	Designed to meet CE, CSA, TUV, EN60950, and IEC/EN61010-1
Dimensions	Generator: 419mm x 265mm x 143mm Control unit: 254mm x 247mm x 70mm (Smaller control unit for models ≤100kV)
Weight	Generator: 21 Kg Control unit: 3 Kg
X-ray Tube	
X-ray Tube Type	Glass
X-ray Focal Spot Size	0.8 mm as per IEC60336 0.5 mm available upon request
Beam Port	Fan beam: 80° X 10° Cone beam: 30°, 40°
Operating Environment	
Operating Temperature	0°C to 40°C
Storage Temperature	-40°C to 85°C
Thermal Cut Off	60°C ± 3°C of oil temperature
Humidity	98% non-condensing



IXS1620

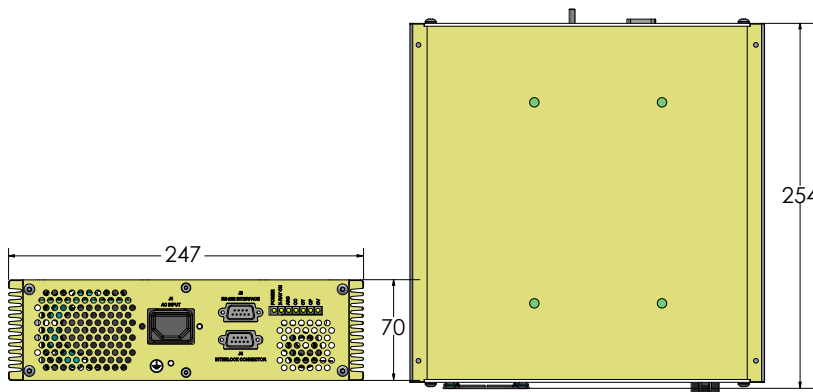
160 kV, 200 W

Generator



Unit: mm

Control Unit



Unit: mm

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 $60^{\circ}\text{C} \pm 3^{\circ}\text{C}$
OP	Illuminated when selected power exceeds the rated power
OV	Over voltage fault

J2: RS232 Interface

Pin Out	Name
1	N/A
2	TX-
3	RX+
4	N/A
5	SIGNAL GRD
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

VJ Technologies Offices

VJ Technologies Inc., 89 Carlough Road, Bohemia NY 11716 USA

East Haven CT

Littleton MA

Buford GA

Paris, France

Bengaluru, India

Suzhou, China