

# Integrated X-ray Source IXS1650

160 kV, 500 W



## Applications

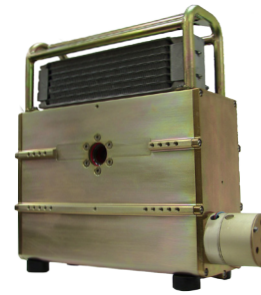
Industrial NDT, Security Scanners, Medical Research, Product Quality Monitoring

Multipurpose Generators  
High Performance  
Competitively Priced

### Key Features

- Ideal Alternative to Conventional High Voltage Generator and X-ray Tube Setup
- Integrated High Voltage Generator, X-ray Tube, Control Electronics, and Heat Radiator
- Radiation Shielded
- Cone or Fan beam available for flat panel or line sensor detection
- User Friendly RS232 Digital Interface

<b>Input Line Range</b>	115/230 VAC, 50/60 Hz
<b>Output kV</b>	25–160 kV
<b>Output mA</b>	0.2 – 8.0 mA
<b>Output Power</b>	500 W continuous maximum
<b>Voltage Regulation</b>	Load: <0.1% at max kV output over the output mA range Line: <0.1% at max kV output over the input line range
<b>Current Regulation</b>	Load: <0.5% at max mA output over the output kV range Line: <0.5% at max mA output over the input line range
<b>Ripple</b>	kV: <1.0% p-p of maximum output mA: <1.0% p-p of maximum output
<b>Repeatability</b>	kV: <0.5% mA: <0.5%
<b>Overshoot</b>	kV: ≤5% of rated output
<b>Output Rise Time</b>	Standard Rise Time ≤ 500 msec. from 10%–90% of max rated output (Faster Rise Time available upon request)
<b>Cooling</b>	Air Cooled (Several heat exchanger options available)
<b>Radiation shield</b>	Less than 0.5 mR/hr at 5 cm from the surface of the chassis as per FDA 21 CFR 1020.40

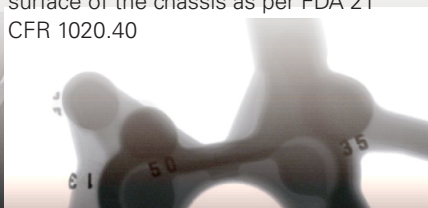


Generator



Control Unit

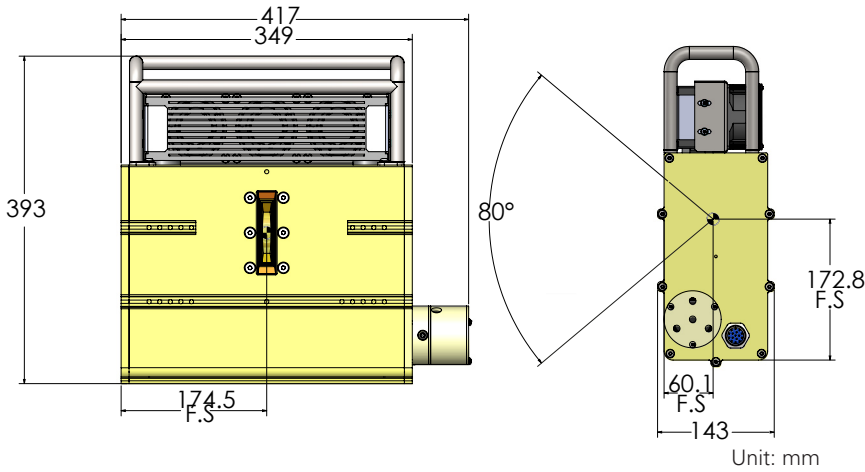
<b>Safety and Regulatory Compliances</b>	Designed to meet CE, CSA, TUV, EN60950, and IEC/EN61010-1
<b>Dimensions</b>	Generator: 417mm x 393mm x 143mm Control unit: 254mm x 247mm x 70mm
<b>Weight</b>	Generator: 23 Kg Control unit: 3 Kg
<b>X-ray Tube</b>	
<b>X-ray Tube Type</b>	Glass
<b>X-ray Focal Spot Size</b>	0.8 mm as per IEC60336 0.5 mm available upon request
<b>Beam Port</b>	Fan beam: 80° X 10° Cone beam: 30°, 40°
<b>Operating Environment</b>	
<b>Operating Temperature</b>	0°C to 40°C
<b>Storage Temperature</b>	-40°C to 85°C
<b>Thermal Cut Off</b>	60°C ± 3°C of oil temperature
<b>Humidity</b>	98% non-condensing



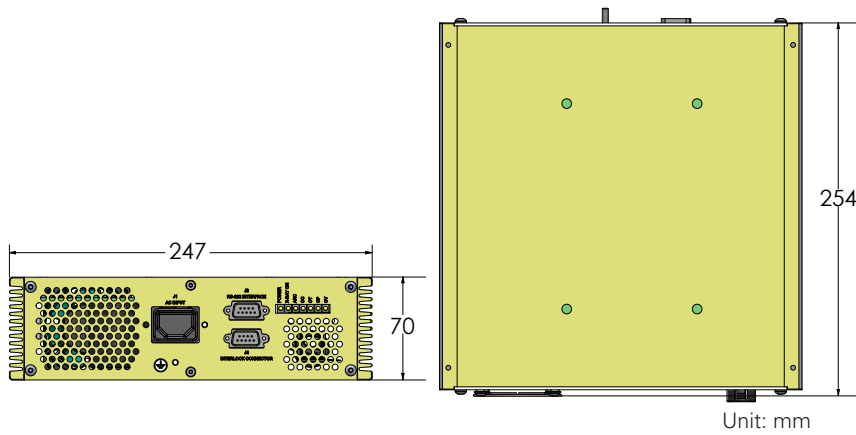
# IXS1650

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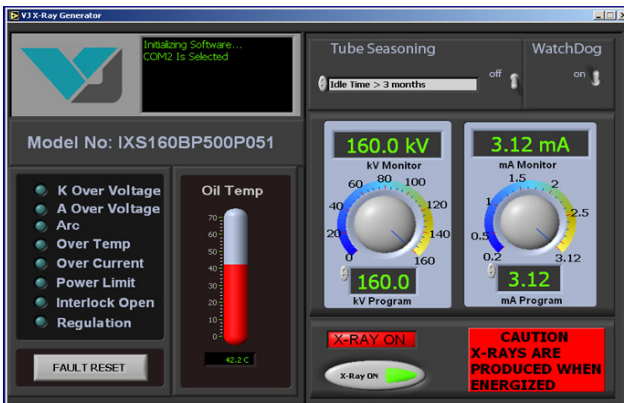
## Generator



## 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

## 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

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