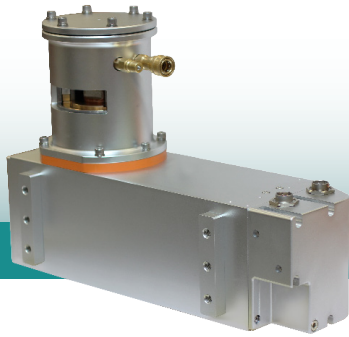


# IXS161k

## 160 kV, 1 -1.5 kW



### Applications

Industrial NDT, Security, General X-ray Operations

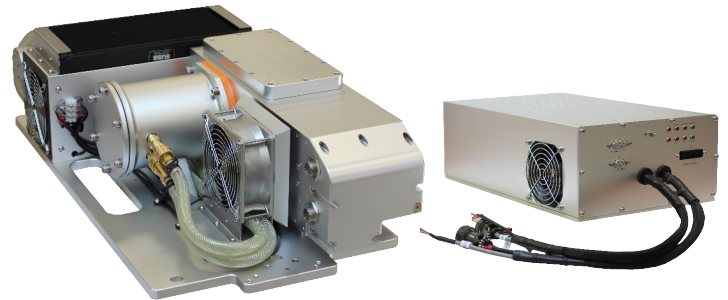
## Multipurpose Sources With Metal Ceramic Tube

#### Key Features

- Intergrated High Voltage Generator, Metal Ceramic X-ray Tube and Control Electronics
- Robust Configuration with Metal Ceramic tube for higher Performance and Power
- Design to operate in rotational gantry attributed to its compactness modular design for weight distribution and balance
- Radiation Shielded
- RS232/422 Digital Interface

#### Specifications

<b>Input Line Range</b>	220 VAC $\pm$ 10%, 50/60 Hz
<b>Output kV</b>	80–160 kV
<b>Output mA</b>	1.0–8.0 mA
<b>Output Power</b>	1kW continuous (up to 1.5kW)
<b>Voltage Regulation</b>	<0.1% for combined line and load
<b>Current Regulation</b>	<0.5% for combined line and load
<b>kV Ripple</b>	<0.2%rms at Frequency $\leq$ 10KHz $\leq$ 2% peak-peak at Frequency > 10KHz
<b>Repeatability</b>	kV: $\pm$ 0.1% mA: <0.5%
<b>Overshoot</b>	kV: $\leq$ 5% of rated output voltage
<b>Output Rise Time</b>	kV rise time is 2-3sec from 0 to programmed kV
<b>Cooling</b>	X-ray tube: Water Cooled HV Module: Air Cooled
<b>Radiation shield</b>	Less than 0.5 mR/hr at 5cm from the surface of the chassis as per FDA 21 CFR 1020.40
<b>Safety and Regulatory Compliances</b>	Designed to meet CE, EN/UL61010-1 and EN61326-1
<b>Dimensions</b>	Generator: 527mm x 214mm x 368mm Control unit: 411mm x 259mm x 133mm
<b>Weight</b>	Generatort: 36 Kg Control unit: 10Kg



Generator with Cooler

Control Inverter

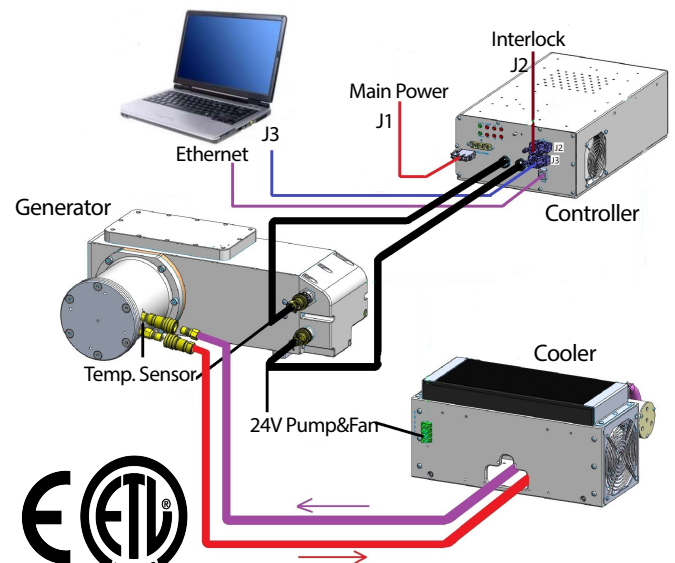
#### X-ray Tube

<b>X-ray Tube Type</b>	Metal Ceramic, Anode Grounded
<b>X-ray Focal Spot Size</b>	1.5mmx1.6mm (For Ref. only) EN12543
<b>Beam Port</b>	Fan beam: 90° x 15° (For Ref. only)

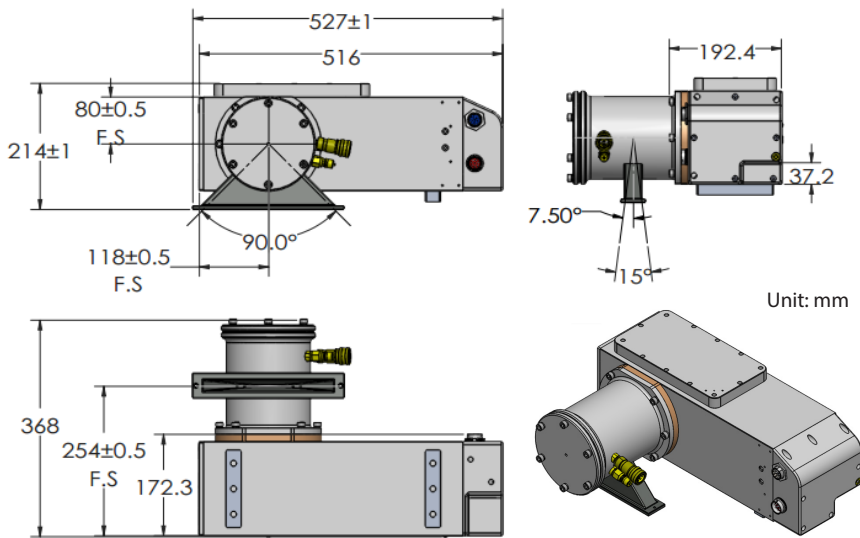
#### Operating Environment

<b>Operating Temperature</b>	5°C to 40°C
<b>Storage Temperature</b>	-20°C to 80°C
<b>Thermal Cut Off</b>	60°C $\pm$ 3°C of oil temperature
<b>Humidity</b>	10%-90% non-condensing

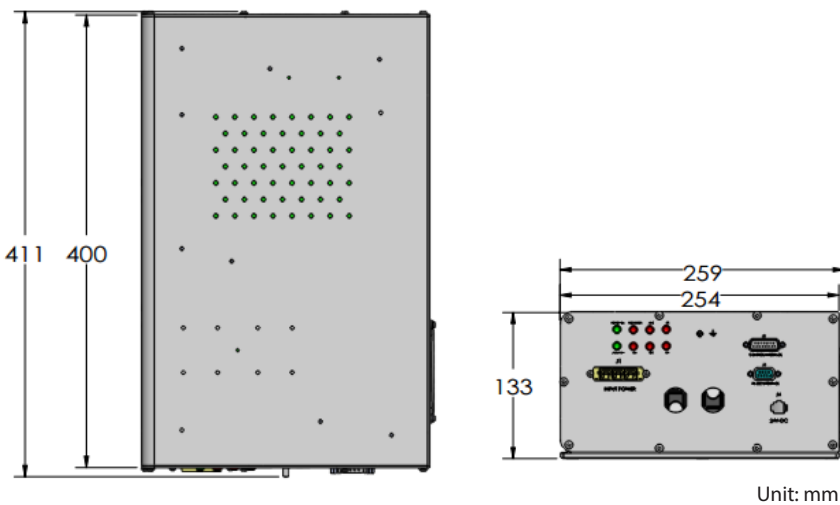
#### System Connection Diagram (Reference Only)



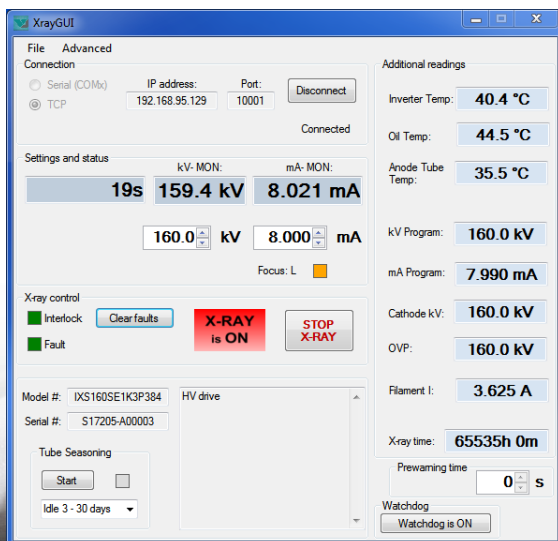
## Generator



## 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±3°C
OP	Illuminates when selected power exceeds the rated power
OV	Over Voltage fault

## J1: AC Input

N	Neutral
GND	Ground
L	220VAC ±10% Input

## J2 Connector: Interlock

Pin Out	Name
1	Interlock out(+12VDC)
2	Interlock In(+12VDC)
3	X-ray On Relay (SSR) contact Common
4	N/A
5	X-ray Relay (SSR) Contact N/O (LH1502BACTR) (200mA max)
6	Ground
7	N/A
8	N/A
9	N/A
10	N/A
11	N/A
12	N/A
13	N/A
14	Cooler Fault
15	N/A

## J3 Connector: RS422 (9 Pin Female)

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