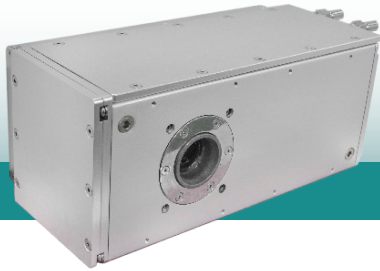


IXS1010

100 kV, 100 W



Applications

Thickness Gauging, X-ray Analysis

Multipurpose Sources

Key Features

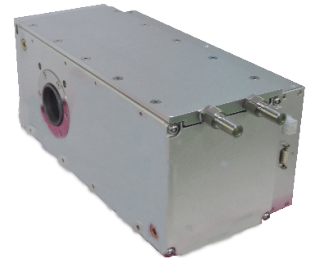
- Integrated High Voltage Generator, X-ray Tube, and Control Electronics
- High Stability
- Form Factor Designed Specifically for Thickness Gauging
- Radiation Shielded
- User Friendly RS232 Digital Interface
- 24 VDC Input

Specifications

Input Line Range	24 VDC \pm 10%
Output kV	30 - 100 kV
Output mA	0.05 - 2.0 mA
Output Power	100 W (Continuous)
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
Current Regulation	Load: <0.1% at max mA output over the output kV range Line: <0.1% at max mA output over the input line range load:
Ripple	kV: < 0.5% rms of maximum output mA: < 20 μ A p-p of maximum output
Repeatability	kV: <0.5% mA: <0.5%
kV Stability	0.01% per $^{\circ}$ C over the operational ambient temperature range; 0.1% in 8 hours after 40 min warm up
Overshoot	kV: <5% of rated output
Output Rise Time	Standard Rise Time <1 sec to within 1% of programmed value
Cooling	Water Cooled (Optional air cool for lower output units)
Radiation shield	Less than 0.5 mR/hr at 5cm from the surface of the chassis as per FDA 21 CFR 1020.40

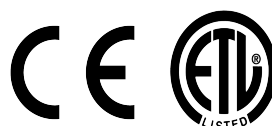


Generator with mounted control unit

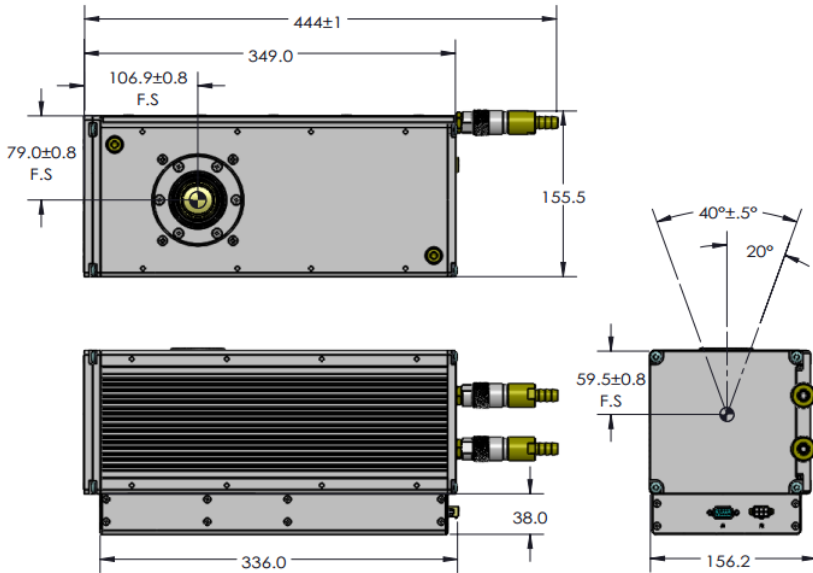


Generator with 40 $^{\circ}$ beam port

Safety and Regulatory Compliances	Designed to meet CE EN/UL61010-1 and EN61326-1
Dimensions	Generator: 349mm x 156mm x 172mm
Weight	Generator: ~15 kg
X-ray Tube	
X-ray Tube Type	Glass
X-ray Focal Spot Size	0.8 nominal as per IEC60336
Beam Port	Cone beam: 40 $^{\circ}$
Operating Environment	
Operating Temperature	5 $^{\circ}$ C to 40 $^{\circ}$ C
Storage Temperature	-20 $^{\circ}$ C to 85 $^{\circ}$ C
Thermal Cut Off	60 $^{\circ}$ C \pm 3 $^{\circ}$ C of oil temperature
Humidity	98% non-condensing



Generator



Unit: mm

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	Illuminated when selected power exceeds the rated power
OV	Over Voltage fault

J1 Connector: (RS232 9 Pin Female)

Pin Out	Name
1	N/A
2	TX-(Transmit)
3	RX-(Received)
4	N/A
5	Signal Ground
6	TBD-External kV Program
7	TBD-External uA Program
8	TBD-External kV Monitor
9	TBD-External uA Monitor

Graphical User Interface



J2 Connector

Pin Out	Name
1	+24VDC Input
2	+24VDC Input Return
3	Power Interlock Out
4	Power Interlock In
5	X-Ray On Lamp(24VDC,0.2A max.)
6	N/A