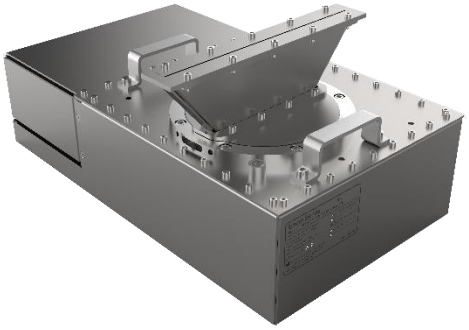


RAXON160HPB is a high-power industrial X-ray source for producing a beam of high intensity X-rays with small focal spot and high stability which ensures uniform beam intensities and dose rate throughout its fan/cone-shaped beam. Stable voltage and electrical power applied to X-ray tube guarantees stable dose exposure and high-quality images in digital radiography systems.

Applications

- Industrial Radiography
- Non-Destructive Testing
- Food Inspection
- Security Inspection
- Densitometry and Thickness Measurement

Specifications

X-ray Characteristics:
Tube Type: Stationary Anode, Glass tube, Tungsten target, Be filter
Focal Spot: 0.8mm (IEC 336)
Beam Filter: 3mm thick 6061 Al, ±0.01
Beam Geometry: Symmetrical fan up to 75° x 30°, cone up to 40°

Input Voltage:
220±10%Vac, 50/60Hz, 5A maximum
X-ray Tube Voltage:
Nominal X-ray tube voltage is adjustable between 80kV to 160kV with 10kV step.
X-ray Tube Current:
0.2mA to 3mA over specified tube voltage range
X-ray Tube Power:
320W, continuous mode
Voltage Regulation:
Line: ±0.1% for a ±10% input line change of nominal input line voltage
Load: ±0.1% for a 0.2mA to 3mA load change
Voltage Accuracy:
Voltage measured across the X-ray tube is within ±2% of the programmed value
Voltage Risetime:
Ramp time shall be <300ms from 10% to 90% of rated output
Voltage Overshoot:
Within 5% of rated voltage in <10ms
Voltage Ripple:
Up to 1% pp of rated voltage
Current Regulation:
Line: ±0.1% for a ±10% input line change of nominal input line voltage
Load: 0.5% @ 80-160kV, 0.2mA to 3mA
Current Accuracy:
Current measured through the X-ray tube is within ±5% of the programmed value
Current Risetime:
<300ms from 10% to 90% of rated output
Arc Intervention:
4 arcs in 10 seconds with a 200ms quench = Shutdown

Filament Configuration:
Internal high frequency AC filament drive with closed loop filament emission control

Digital Interface:
RS-232/USB/Ethernet Interface selectable port

Control Software:
A demo GUI for engineering evaluations will be provided for the RS-232/USB/Ethernet digital interface and Encoded Command Port for customized software

Emergency Stop:
A physical emergency stop is embedded for prompt shut down in case of emergency independent of software and microcontroller modules

Operating Temperature:
0°C to +40°C
Storage Temperature:
-40°C to +70°C
Humidity:
10% to 95% relative humidity, non-condensing

Tube Cooling:
Oil circulation and cooling (Optional)
Motherboard Cooling:
Natural convection augmented by customer provided 250cfm cooling fans for continuous operation

Input Power Line Connector:
Standard 3pin Line-Null-Earth connector

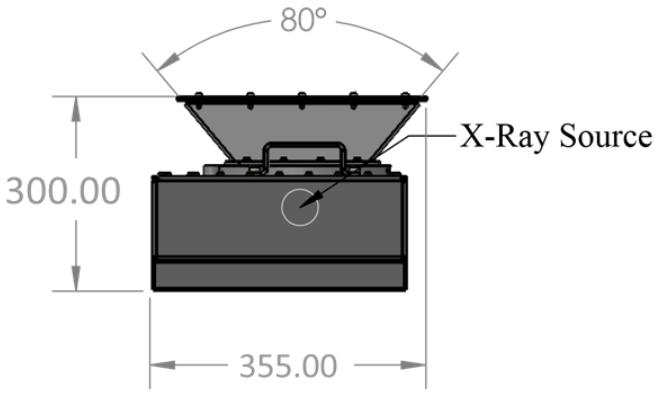
Dimensions:
630mm × 355mm × 300mm
Weight (Approx.):
70 kg

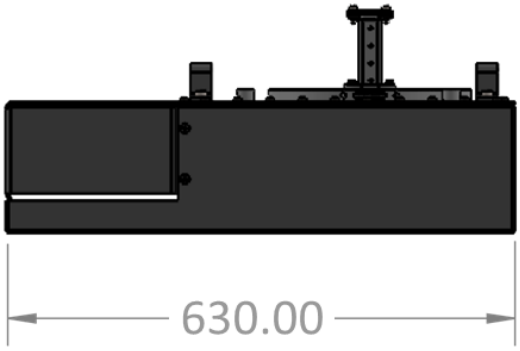
Installation Orientation:
Can be mounted in any orientation.

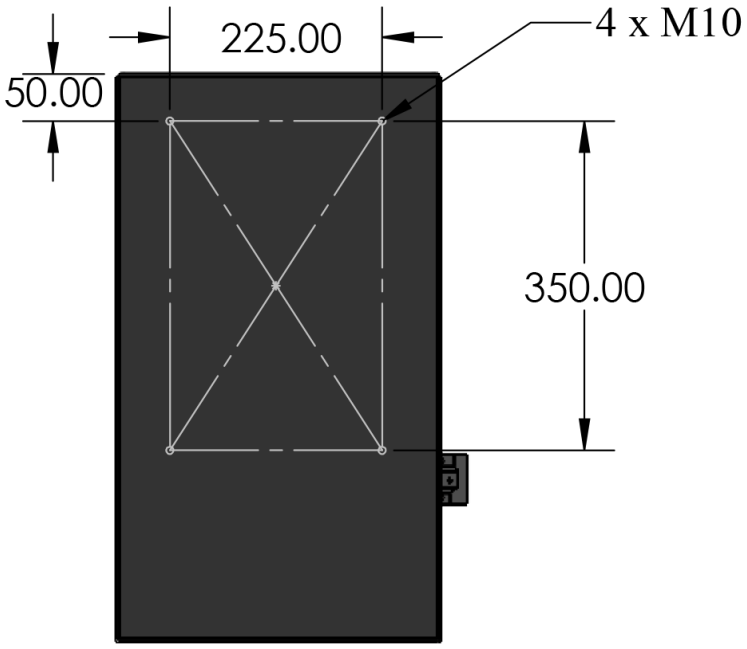
X-ray Leakage:
Not to be greater than 5µS/hr at 5cm outside the external surface (EN61010-1)

Accessories:

RS-232/USB Connection cable
Ethernet connection cable
User Manual
Software







Dimensions are in millimeters