RAXON120HPB

RAXON120HPB is a high-power 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 applications.

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

Focal Spot: 0.8mm (IEC 336)

Beam Filter: 2mm thick 6061 Al, ±0.01

Beam Geometry: Symmetrical fan up to 80° x 30°, cone up to 40°

Input Voltage:

220±10% Vac, 50/60Hz, 2A

X-ray Tube Voltage:

60-120kV

X-ray Tube Current:

0.1-2mA

X-ray Tube Power:

240W, continuous mode

Voltage Regulation:

Line: ±0.1% for a ±10% input line change of nominal input line voltage

Load: ±0.1% for a 0.1mA to 2mA load change

Voltage Accuracy:

Voltage measured across the X-ray tube is within ±2% of the programmed value

Voltage Risetime:

Ramp time shall be <200ms 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% @ 60-120kV, 0.1-2mA

Current Accuracy:

Current measured through the X-ray tube is within ±5% of the programmed value

Current Risetime:

<200ms from 10% to 90% of rated output

Arc Intervention:

PARDIOTECH
No 110 ,13th Fath, Fath highway, Tehran
www.pardiotech.com
info@pardiotech.com
Sales Department: 02166395059
Technical Support: 02166394902

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:

450mm X 425mm X 190mm

Weight:

60 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
S/W controlled fast beam shutter

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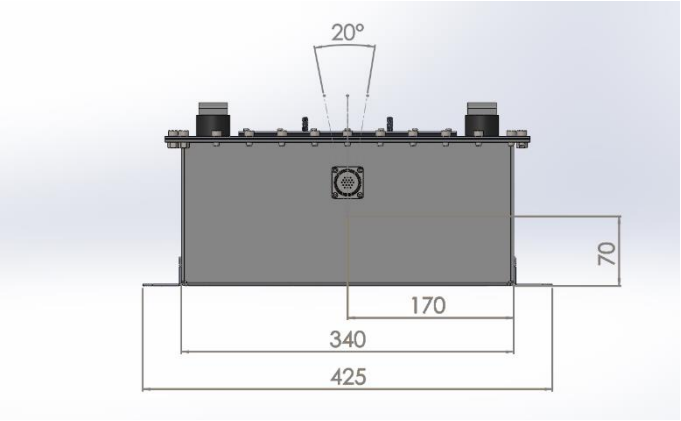

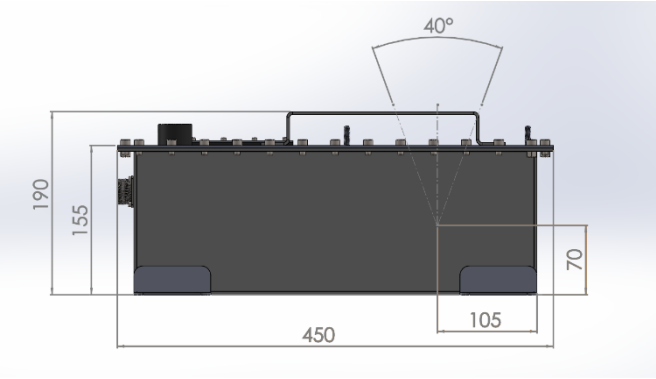

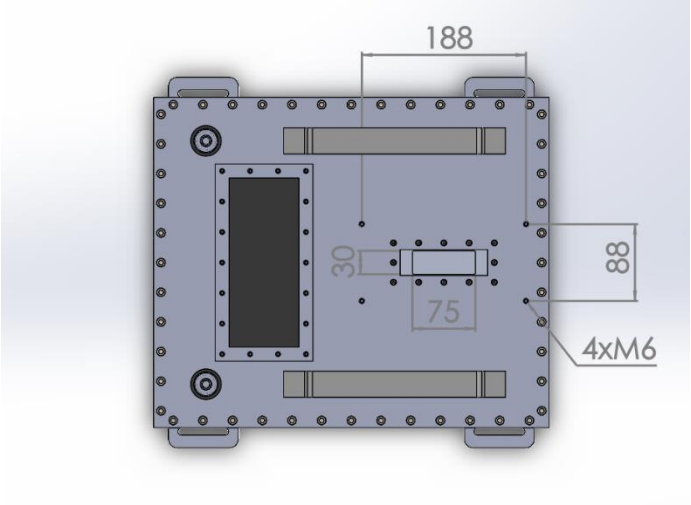

Dimensions are in millimeters