

X-RAD 160 Biological X-Ray Irradiator



The **X-RAD 160** is a self-contained X-ray irradiation system for high and low dose radiation studies normally conducted in research laboratories.

The cabinet requires no additional shielding and features an adjustable specimen shelf and filter station to provide ultra stable and uniform dose delivery.

The TouchRAD Control is multi-user, password protected touch screen interface with a transportable database that can track individual system usage

Passwords, programmed exposure settings, and database management are controlled by a super-user

Options available include; Collimators, Dose Measurement & Control, Holding Fixtures.

Contact PXI for additional information



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Technical Data

Cabinet Features

- Adjustable Sample Shelf: 15cm to 63cm SSD
- Changeable Beam Conditioning Filter Slides
- User Entry Port to introduce small tubing and cables into chamber area
- Complies with US and International regulations for Cabinet X-ray systems

Cabinet Size and Weight

- Overall Dimensions: 47"(119cm)w x 35"(89cm)d x 77"(196cm)h
- Irradiation Chamber: 14.75"(42cm)w x 15"(42.75cm)d x 22"(55cm)h
- Weight: 1600 lbs (550 kg)

Power Requirement

- 1N PE 230 VAC, 50/60 Hz, or 3N 400 VAC $\pm 10\%$, 50/60 Hz, 10 KVA

High Voltage Generator

- Maximum Output Voltage: 160 KV
- Maximum mA: 45

X-ray Tube

- Maximum Potential: 160 KV
- Maximum Power: 3000 W (higher power option available)
- Type: Metal Ceramic, Fixed Anode, Water Cooled
- Focal Spot: 7.5 mm (per EN12543)
- Inherent Filtration: 0.8mm Be
- Cooling Pump: Water-Air or Water-Water models available

Dose Output

- Raw Beam: >50 Gy/min at 160KV, 19mA, 30 cm SSD
- Filtered Beam: 6.5 Gy/min at 160KV, 19mA, 30cm SSD, (Filter = 2mm Al)

Operators Control

- KV Setting & Display Accuracy: 5KV – 160 KV in 0.1 KV increments
- mA Setting & Display Accuracy: 0.1mA to 45 mA in 0.01 mA increments
- Settings Accuracy: < 1%
- Exposure Timer: 1-9999 seconds
- Programmable Settings: Thousands of locations to recall exposure parameters
- Users & Super-users: >1 thousand individual accounts can be created

Additional X-Ray Unit Features

- Automatic warm-up with Intelligent Tube Conditioning
- Graphical User touch screen interface for operation simplicity
- Individual user passwords required for system operation
- Excel database of exposure & user history can be downloaded to a USB flash drive