

# X-Rad160XL

The best choice for advanced cellular research

A self-contained x-ray system designed to deliver a precise radiation dosage to specimens in a biological or small animal research laboratory. The x-ray tube is used specifically for radiation therapy, having a highly homogenous beam.

Featuring our TouchRad control panel - a multi-user, password protected touch screen interface - the X-Rad160 XL includes a transportable database that can track individual system usage.

## Key Features

High stability 160kV X-ray tube and generator

TouchRad touchscreen control panel

Full screen real-time specimen viewing

Beam Hardening filter and collimator holder with filter recognition

Key operated motorized adjustable specimen shelf

Large internal chamber for increased throughput and multiple options





# X-Rad160XL

## Cabinet Features

No additional shielding required

Adjustable sample shelf, 15 - 90cm SSD

Changeable beam conditioning filter slides

Automatic warm-up with Intelligent Tube Conditioning

Interior light and camera for sample viewing

Cabinet port to introduce small tubing and cables to the chamber area

Complies with US and International regulations for Cabinet X-ray systems

## Interface Features

On-unit, graphical user touch-screen interface

Individual user passwords required for system operation

Up to 9999 individual accounts can be created

Excel database of exposure and user history can be downloaded to a USB drive

Programmed exposure settings, database management and user passwords controlled by an administrative Super User

## Cabinet Specification

Overall dimensions:  
W 56"(142cm) x D 31"(78cm) x H 76"(193cm)

Irradiation Chamber:  
W 25"(64cm) x D 27"(69cm) x H 42"(106cm)

Weight: 3300lbs (1497kg)

Power: 230VAC 1Ø, 50A, 50/60Hz

## High Voltage Generator

Maximum Output Voltage: 160kV

Maximum Current: 30mA

## X-ray Tube

Standard Max. Output: 160kV / 18.7mA

High Powered Max. Output: 160kV / 25mA

Max. Power: 4000 W

Type: Metal Ceramic, Fixed Anode, Water Cooled

Single Focal Spot: 7.5mm (per EN12543)

Dual Focal Spot with OptiMax: 1mm, 5.5mm (per EN12543)

Inherent Filtration: 0.8mm Be

Cooling Pump: Water-Air or Water-Water models available

## Dose Output

Raw Beam: ~60 Gy/min at 160kV, 18.7mA, 30cm SSD

Filtered Beam: ~5.5 Gy/min at 160kV, 18.7mA, 30cm SSD (Filter 1 = 2mm Al)

High Powered: ~7.3 Gy/min at 160kV, 25mA, 30cm SSD (Filter 1 = 2mm Al)

## Operators Control

kV Setting + Display Accuracy:  
5kV – 160kV in 0.1kV increments

mA Setting + Display Accuracy:  
0.5mA - 30mA in 0.01mA increments

Settings Accuracy: < 1%

Exposure Timer: 1 - 99999 seconds

Programmable Settings:  
1000's of locations to recall exposure parameters

## Options

### Programmable Motorized Rotating Shelf

**Environmental Chamber**  
with O<sub>2</sub>, CO<sub>2</sub> and heating control

### Planetary Turntable

for even dose distribution for up to 6 multiwell plates at a time

### TouchRad Dose Measurement and Control System

### Adjustable Light Illuminated X-ray Collimator