

# X-Rad320

For all cell, tissue and small animal irradiation studies

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 touchscreen interface - the X-Rad320 includes a transportable database that can track individual system usage.

## Key Features

- TouchRad touchscreen control panel
- Full screen real-time specimen viewing and image capture
- Beam Hardening filter holder
- Adjustable specimen shelf





# X-Rad320

## Cabinet Features

No additional shielding required

Adjustable sample shelf, 20 - 90cm SSD

Changeable beam conditioning filter slides, 2 supplied

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

Ability to assign users access to only specific programs

## Cabinet Specification

Overall dimensions:  
W 38"(95cm) x D 42"(105cm) x H 78"(195cm)

Irradiation Chamber:  
W 30"(75cm) x D 34.5"(86cm) x H 41"(102cm)

Weight: 5500lbs (2500kg)

Power: 230VAC 1Ø, 50A, 12.5 KVA

## High Voltage Generator

Maximum Output Voltage: 130kV

Maximum Current: 5mA

## X-ray Tube

Max. Potential: 320kV / 12.5mA

Max. Power: 4000 W

Type: Metal Ceramic, Fixed Anode, Oil Cooled

Focal Spot: 8mm<sup>2</sup> (per EN12543)

## Dose Output

3 Gy/min at 320KV, 12.5mA, 50cm SSD (HVL $\approx$  1mm Cu)

1 Gy/min at 320KV, 12.5mA, 50cm SSD (HVL $\approx$  4mm Cu)

>15 Gy/min at 320KV, 12.5mA, 50cm SSD  
(No Beam Hardening)

## Operators Control

kV Setting + Display Accuracy:  
5kV – 320kV 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

### Multi-user Interface

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

### TouchRad Dose Measurement and Control System

### Adjustable Light Illuminated X-ray Collimator

### Fixed Beam Collimators