

The CP-160 Cabinet X-Radiator™ System

The **CP-160** cabinet x-ray system is a 160 kV unit with a 1000 W maximum. Maximum current is 16 mA. The unit's large cabinet accommodates specimens up to 40" H x 24" W x 24" D. A 2 RPM electrically operated turntable helps ensure uniform dosing. The high-voltage power supply is adjacent to the cabinet to maximize the working space.

The CP-160 is available with a dual focal spot x-ray source – one for irradiation and a smaller spot that's suitable for imaging. For imaging applications, specify the dual tube option. The unit's programmable controller allows the user to preset warm-up times, time formats, focal spot sizes and other operating modes. Controls are user friendly, allowing operation by persons with no previous x-ray training.

These factors combined with a modest purchase price make the CP-160 a safer, simpler, and less costly alternative to radioisotope irradiators for a variety of applications, including animal studies, food sterilization and electronic components testing.

The table to the right provides basic information on these units' radiation output at various source-to-object distances. Comprehensive dosimetry data is available from Faxitron.

CP-160 X-Radiator System Specifications

Energy range, kV	10-160 (constant potential)
Tube current	100 µA to 16 mA (1000 watts max.)
Focal spot size, IEC	Dual focal spot sizes: 0.4 mm/3.0 mm
Focal spot size, EN12543	Dual focal spot sizes: 1.0 mm/5.5 mm
Inherent filtration, max.	0.8 mm* beryllium
X-ray beam angle	40° divergence
Maximum coverage	28" (72 cm)
Source to object distance	5" to 39" (12.7 cm to 99 cm)
Exposure time	Manual (continuous) or variable from 1 sec to 99.9 min
Power requirements	220 VAC +/- 10%, 50/60 Hz 2000 VA max.
Cooling	Integrated closed-loop heat exchanger
Specimen turntable	Electrically operated, 2 RPM
External dimensions	62" H x 48" W x 39" D (157 cm x 122 cm x 99 cm)
Internal dimensions	41" H x 24.5" W x 24.25" D (104 cm x 62 cm x 61.6 cm)
Weight	1200 lb (745 kg)
Shipping weight	1550 lb (705 kg)

*X-ray tube: stationary anode, tungsten target, metal ceramic with beryllium window 0.8 mm thick
Cable access ports standard. Higher output sources available – contact Faxitron

CP-160 Dosimetry: 160 kV @ 6.3 mA

Filtration: 0.5 mm Al	R/minute @ 5 in (12.7 cm)*	R/minute @ 13 in (33 cm)**
Direct to surface	1,642	243
1 cm H ₂ O	1,540	202
2 cm H ₂ O	1,095	150
3 cm H ₂ O	836	116
4 cm H ₂ O	664	92

* Beam dia. 4 in (10 cm)

** Beam dia. 10.5 in (26 cm)



faxitron x-ray

Faxitron X-Ray LLC
575 Bond St.
Lincolnshire, IL 60069

Sales & Inquiries:
sales@faxitron.com
Tel. 888.465.9729

All Faxitron systems have shielded cabinets and utilize redundant safety interlocks. No NRC site licensing or reporting is required. They are certified to comply with standards set by the U.S. Food and Drug Administration Center for Devices and Radiological Health, (21 CFR-1020.40). Irradiators are designed to comply with applicable U.S. and international electrical safety standards and are certified to comply with the European EMC directive. 0002-0037/Rev A