

KUBTEC[®]
S C I E N T I F I C

Reliable Irradiation in
a Wide Range of Doses to
Meet a Wide Range of Needs

XCELL[®]

Free-Standing Irradiator Systems



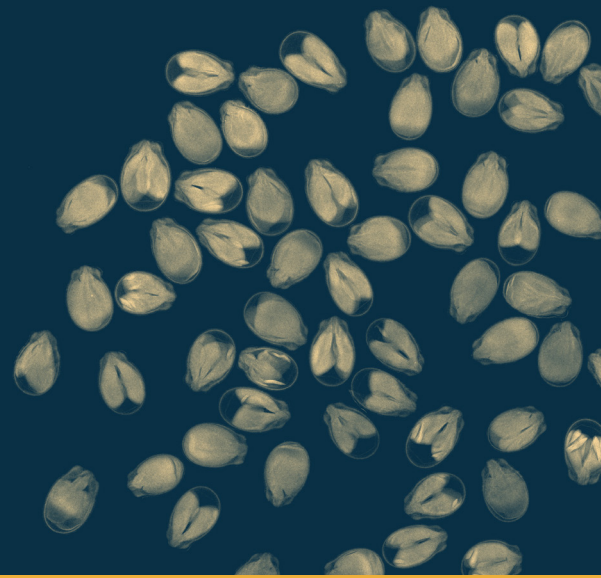
Safe
Cost effective
Accurate
Powerful
User-friendly



KUBTEC® XCELL® Line of Irradiator Systems

Provides researchers with accurate, reliable, and repeatable treatments, saving time and improving efficiency. Our systems cover a wide spectrum of applications, like small animal studies, tissue culture, and food safety research.

X-ray irradiators are seen as the direct replacement for gamma and cesium irradiators which contain harmful isotopes and require licensure from the US Nuclear Regulatory Commission. The KUBTEC line of irradiators are fully US FDA 21 cfr 1020.40 compliant, self-contained fully shielded cabinets, easy to operate with no additional training or licenses required, and provides an affordable solution to fulfill almost any radiation requirement.



	XCELL 160 (1.8 kW)	XCELL 160 (3.0 kW)
Tube Potential	20-160 kVp	20-160 kVp
Tube Current	Up to 30 mA	Up to 30 mA
Inherent Filtration	0.8 mm Be	0.8 mm Be
Input Power	220 VAC +/- 10%, 20 Amps, 47/63 Hz Single Phase	220 VAC +/- 10%, 20 Amps, 47/63 Hz Single Phase
Interior Chamber Size	24" L x 24" W x 42"H (61 x 61 x 107cm)	24" L x 24" W x 42"H (61 x 61 x 107cm)
Beam coverage	17" x 17" (43 x 43cm)	17" x 17" (43 x 43cm)
Outside Dimensions	46" L x 34" W x 76" H (117 x 87 x 193cm)	46" L x 34" W x 76" H (117 x 87 x 193cm)
Dosage	Up to 3.2 Gy/min at 160kV, 11.3mA, 30 cm SOD (Filter = 2mm Al)	Up to 5.2 Gy/min 160kV, 18.7mA, 30 cm SOD (Filter = 2mm Al)
Optional X-ray Imaging	Yes	Yes
Software	DIGISOURCE®, DIGICOM®	DIGISOURCE, DIGICOM

*Reported values are system-specific and are subject to change without notice

KUBTEC® DIGISOURCE® Software

DIGISOURCE® software comes with all KUBTEC® XCELL® X-ray irradiator systems. The software allows you to control the energy level, irradiation time, and desired dosage for each sample, including the ability to set and monitor both kV and mA levels throughout the treatment. KUBTEC DIGISOURCE is utilized by researchers to irradiate organic and inorganic specimens, material components, and for investigating the effects of radiation on the immune system, different types of cancer cells, and small animals in scientific studies.

Applications include:

- Cell irradiation
- 3D tissue culture irradiation
- Small animal irradiation
- Food safety research
- Seed and grain irradiation
- Sterilization of medical devices, instruments and electronics

	XCELL 225 (3.0 kW)	XCELL 320 (4.5 kW)
Tube Potential	20-225 kVp	Up to ± 320 kVp
Tube Current	Up to 30 mA	Up to 30 mA
Inherent Filtration	0.8 mm Be	4.0 mm Be
Input Power	220 VAC +/- 10%, 30 Amps, 47/63 Hz Single Phase	220 VAC +/- 10%, 40 Amps, 47/63 Hz Single phase
Interior Chamber Size	30" W x 30" D x 40" H (76.2 x 76.2 x 101.6 cm)	32" L x 32" W x 42" H (81 x 81 x 107cm)
Beam coverage	17" x 17" (43 x 43cm)	17" x 17" (43 x 43cm)
Outside Dimensions	24" L x 24" W x 42" H (61 x 61 x 107cm)	52" L x 44" W x 80" H (132 x 112 x 203cm)
Dosage	Up to 5.9 Gy/min 225kV, 13.2mA, 30 cm SOD (Filter = 2mm Al)	Up to 10.0 Gy/min 320 kV, 12.9 mA, 30cm SOD (Filter = 2mm Al)
Optional X-ray Imaging	Yes	Yes
Software	DIGISOURCE, DIGICOM	DIGISOURCE, DIGICOM

XCELL® Irradiator Features:

- Fully shielded and secured X-ray irradiator
- Minimal training required
- Self-contained cabinet
- Large irradiation chamber for a range of samples
- Automatic warm-up with intelligent tube conditioning
- Adjustable sample shelf
- Turntable for uniform irradiation of samples
- Dosimeter for accurate exposure
- Optional integrated digital X-ray imaging capability using proprietary DIGICOM® software, available in all free-standing systems
- Optional entry port to introduce anesthesia and monitoring lines

Also available:

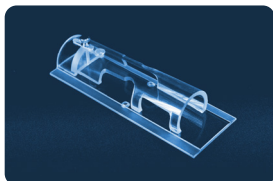
The XCELL 50 Benchtop X-ray Irradiator



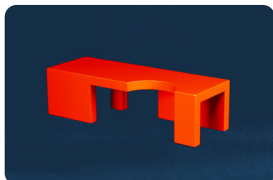
XCELL® Optional Accessories:



Pie Cage



Partial Body
Irradiation Restrainer



Partial Body
Irradiation Shield



Gas Anesthetizing
Box



The XCELL 225
Free-Standing X-ray Irradiator

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