

XCELL[®] 180

Benchtop Irradiator System

High Dose Uniformity
for more reproducible results

The Highest Energy
in a benchtop system



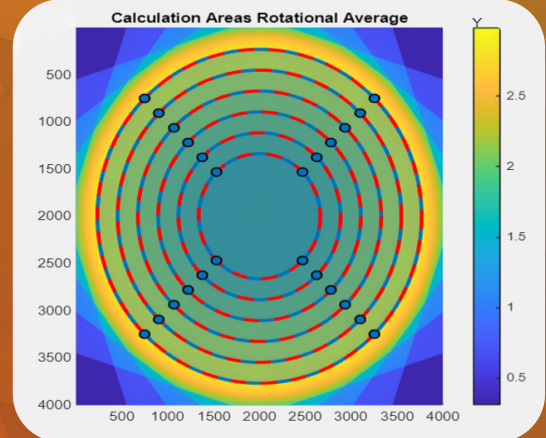
We Know Dose Uniformity is Everything

That's why our XCELL[®] 180 is designed to deliver **high dose uniformity**:

- Highest depth uniformity due to highest energy in a benchtop system
- High spatial uniformity due to unique and innovative beam-flattening technology

That means:

- More consistent dose delivery
- More reproducible studies
- Greater confidence in your data across cohorts and over time



Above: Each system is supplied with a QA document including a radiochromic film scan and detailed validation of the system's rotational dose uniformity specifications.

System Reliability:

Built for your workflow and applications, the XCELL 180 delivers high reliability, so you avoid system failures and interruptions in your studies.

In Vivo Applications:

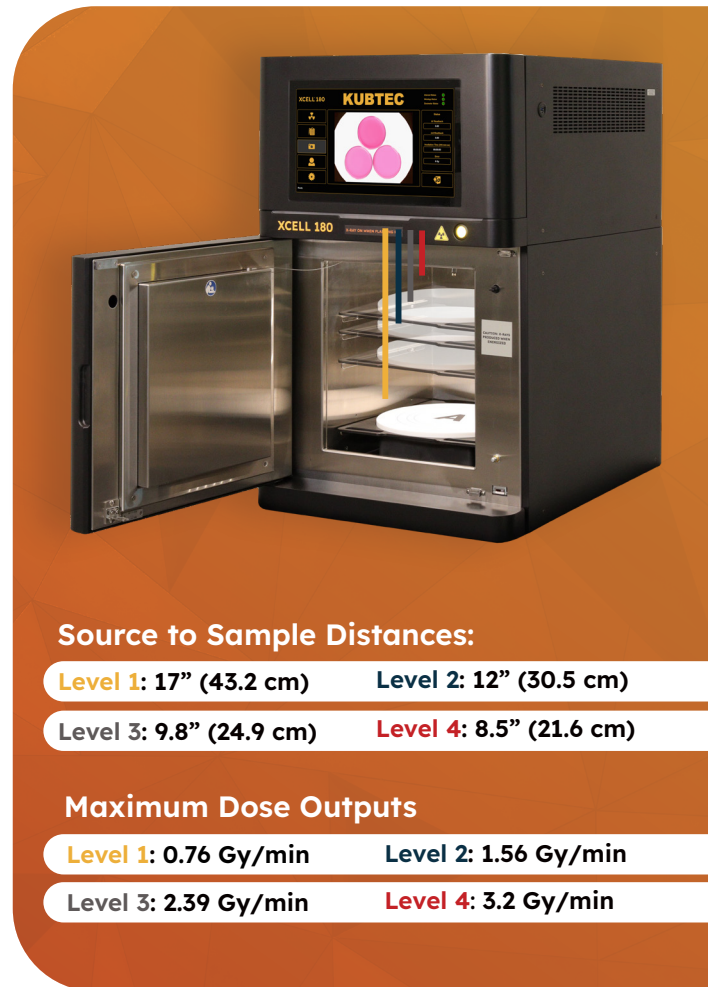
- CAR-T and adoptive cell therapy
- Tumor and cancer immunotherapy
- Radiotoxicity and radiation biology

Ex Vivo/In Vitro Applications:

- CAR-T and adoptive cell therapy
- Gene therapy and viral vector research
- Genotoxicity and radiation sensitivity

XCELL[®] 180: Everything and More

- **Highest Beam Energy** — 180 kV (among benchtop irradiation systems)
- **Largest Chamber** — Large 12” (30.5 cm) irradiation field and turn table; contact level and 3 shelves for flexible source-to-sample distance and dosing
- **Dosimetry** — dose rate, accumulated dose, and elapsed time; integrated dosimeter with periodic calibration
- **Live Visual Feed** — Full-color video camera for real-time cabinet monitoring; works with system screen and mobile app*.
- **Application Versatility** — Mouse Irradiation Kit* and anesthesia port



Source to Sample Distances:

Level 1: 17" (43.2 cm)	Level 2: 12" (30.5 cm)
Level 3: 9.8" (24.9 cm)	Level 4: 8.5" (21.6 cm)

Maximum Dose Outputs

Level 1: 0.76 Gy/min	Level 2: 1.56 Gy/min
Level 3: 2.39 Gy/min	Level 4: 3.2 Gy/min

The XCELL 180:
Unmatched among benchtop systems

Additional Features:



Touch Screen Interface



Automatic Filter Recognition



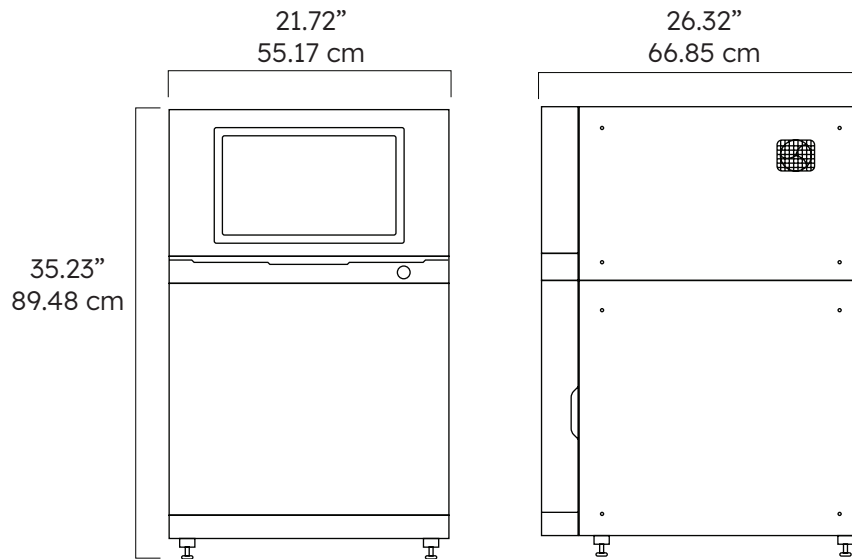
Mobile App*



Automatic Level Detection

*Optional

Specifications



Source Potential	60 – 180 kV
Source Power	990 W
Exposure Modes	Irradiation Time, Accumulated Dose.
Input Power	1800 W
Weight	385.6 kg (850 lbs)
External Dimensions	21.72" W x 26.32" D x 35.23" H (55.17 x 66.85 x 89.48 cm)
Internal Dimensions	13.13" W x 14.94" D x 16.61" H (33.35 x 37.95 x 42.19 cm)

Magnification Levels	Three
Turntable	Electrically controlled, 2 RPM
Tube Current	0.1 mA - 5.5 mA
Source to Sample Distance	<17" (43.18 cm)
Spatial Uniformity (at 17", Mag Level 1)	12" Diameter, >92% (93.0% Typical) 9" Diameter, >92% (98.5 Typical)
Maximum Dose	3.2 Gy/min
Available Filtration	1.6 mm Al, 0.25 mm Cu, Standard 0.5 mm Cu, Thoreaus available upon request
Inherent Filtration:	2.15 mm Al

System Accessories:



Left: 2 standard filters with built-in Filter Recognition capability in sturdy composite frame. Two additional filters available upon request.

Right: Mouse Irradiation Kit

