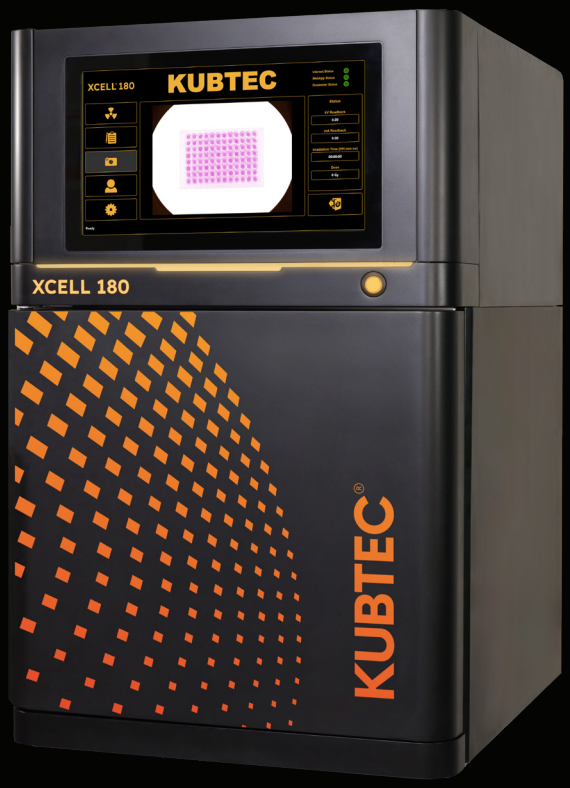
# The XCELL® 180
## Benchtop Irradiator System




## Revolutionize Your Research

The XCELL® 180 System is our newest benchtop irradiation system, a fresh alternative to existing devices on the market. The system features a powerful 180 kV X-ray source, providing the highest available voltage among benchtop irradiators.

Each XCELL 180 unit is equipped with a full color optical camera for real-time visual monitoring of samples and a touch screen interface to accommodate novice and expert users alike. Users can monitor session progress with KUBTEC's new mobile app, DIGISOURCE®. This password-protected application can be used to remotely monitor KUBTEC products, has a cabinet livefeed, and can shut off the device. The unit's administrators can easily download user logs, control system user access, and chat with KUBTEC's team.

**To learn more about our family of benchtop and freestanding irradiators, schedule a demonstration today.**

### General Applications of the XCELL 180 Include:

Tumor Irradiation | Virus Inactivation | Radiotoxicity Studies | Agricultural Irradiation

### Cell & Tissue Research Applications of the XCELL 180 Include:

Cell Line Development | Feeder Cells | CAR-T Cells | NK Cells

## Highlights

**Unmatched Energy Range for Benchtop Systems**
Featuring a robust 180 kV output, this system empowers laboratories to optimize program efficiencies and enhance throughput. The XCELL 180 serves as the ideal solution for researchers requiring voltages that exceed the industry standard 160 kV X-ray source for benchtop units. With a small footprint, the unit satisfies the space-restrictions many laboratories are faced with.

**Large & Uniform Irradiation Area**
A large 12" irradiation area accommodates a wide range of sample sizes, from cells to small animals. With three shelves, users have the flexibility to conduct treatments at varying source-to-sample distances, providing optimal conditions for diverse research needs.

**Dosimetry**
The system provides dose rate, accumulated dose, and elapsed time for precise control of your research outcomes. An integrated dosimeter ensures accuracy through periodic calibration.

**Integrated Optical Camera**
A full-color high resolution camera empowers users to seamlessly oversee their experiments in real time, offering peace of mind to researchers who can now be confident that their sample remains undisturbed. The optical camera's live feed is positioned central to the touchscreen for ease of monitoring, ensuring unparalleled accuracy in research outcomes.

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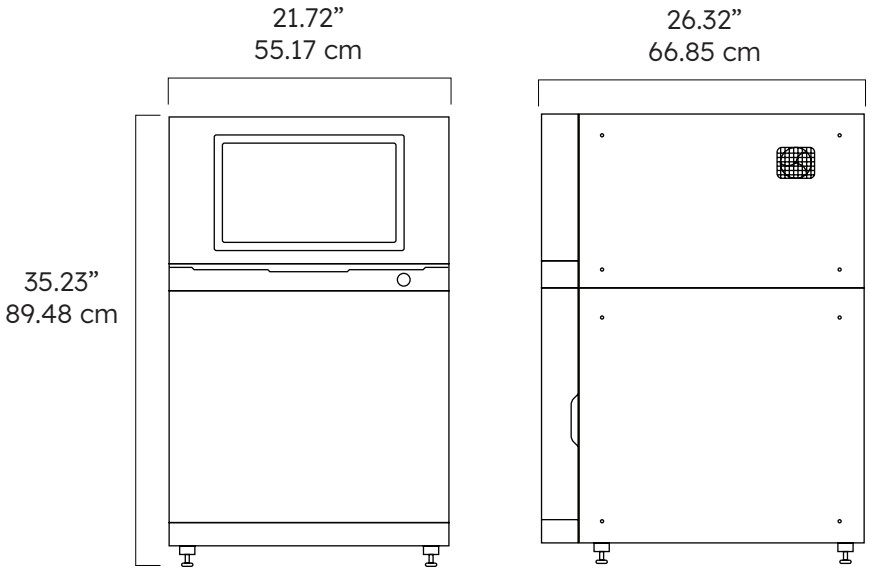
# Specifications

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|---|---|
| **Tube Potential** | 20-180 kV |
| **Tube Power** | 1000 W |
| **Exposure Modes** | Irradiation Time,<br>Accumulated Dose. |
| **Input Power** | 2400 W |
| **External Dimensions** | 21.72” W x 26.32” D x 35.23” H<br>(55.17 x 66.85 x 89.48 cm) |
| **Internal Dimensions** | 13.13” W x 14.94 D x 16.61” H<br>(33.35 x 37.95 x 42.19 cm) |
| **Turntable** | Electrically controlled, 2 RPM |

| | |
|---|---|
| **Magnification Levels** | Three |
| **Tube Current** | 0.1 mA - 5.5 mA |
| **Source to Sample Distance** | <17” (43.18 cm) |
| **Homogeneous Area** | 12” (30.5 cm) diameter, 80% ± 5% |
| **Maximum Dose** | 3.25 Gy/min |
| **Available Filtration** | 1.5 mm Al and 0.25 mm Cu,<br>0.5 mm Cu and Thoreaus<br>(1.5 mm Al + 0.25 mm Cu + 0.8 mm Sn)<br>available upon request |
| **Inherent Filtration:** | 2.15 mm Al |


## 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: 3.24 Gy/min**

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Bro-1 Rev A



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