



Mobetron for IORT

- ▶ Greater Precision
- ▶ Shorter Treatment Time
- ▶ Broader Application

Mobetron for Skin

- ▶ Non-Surgical Treatment
- ▶ Treatment in Minutes
- ▶ Better Cosmesis / No Scarring

Mobetron with FLASH-IQ

- ▶ Higher Dose Rate
- ▶ Dynamic Pulse Modulation
- ▶ Larger Clinical Volumes
- ▶ Platform Scalability

Established Indications

- ▶ Breast Cancer
- ▶ Pancreatic Cancer
- ▶ Colorectal Cancer
- ▶ Gynecological Cancer
- ▶ Head and Neck Cancer
- ▶ Sarcomas
- ▶ Skin Cancer

Product Datasheet

IntraOp® Mobetron® is the only electron beam linear accelerator configurable for Intraoperative Radiation Therapy (IORT) or Electron Therapy for skin cancers. Now, IntraOp becomes the first to offer ultra-high dose rate (UHDR) electron therapy for preclinical and investigational studies of FLASH radiotherapy on an established clinical radiotherapy platform.

Since its introduction, Mobetron has transformed cancer treatment by bringing electrons into the operating room to deliver ablative doses of radiotherapy during surgery. Combining speed and precision within a compact form factor, the Mobetron delivers therapeutic energies previously relegated to expensive, large format LINACs. Mobetron is effective, efficient, and affordable. The Mobetron platform provides the competitive advantage hospitals seek by delivering optimal care for their patients and paving a faster path to new clinical research—unlocking better treatment options for the future.



Beam Parameters

	MOBETRON FOR IORT	MOBETRON FOR SKIN
ENERGY (MeV)	6, 9, 12	6
80% DEPTH DOSE (CM)	2, 3, 4	2
X-RAY CONTAMINATION	<0.5%	<0.1%
DOSE RATE	10 Gy/min (3 Gy/min optional)	10 Gy/min (3 Gy/min optional)
SOURCE TO SURFACE DISTANCE	50 cm	45 cm and 50 cm

Movements

	MOBETRON FOR IORT	MOBETRON FOR SKIN
GANTRY ROTATION	±45°	±90°
TILT	+30°/-10	+30°/-10
COLLIMATOR	n/a	360°
VERTICAL	±15 cm	±15 cm
LONGITUDINAL	±5 cm	±10 cm
LATERAL	±5 cm	±10 cm

Accessories/Collimators

	MOBETRON FOR IORT	MOBETRON FOR SKIN
ROUND	3-10 cm diameter in 0.5 cm increments	6 cm & 10 cm
INSERTS	n/a	Broad range of sizes
BEVEL ANGLES	0°, 15°, 30°, 45°	0°
RECTANGLE	7 cm x 12 cm, 8 cm x 15 cm, 8 cm x 20 cm	n/a
BOLUS	Acrylic (5 mm and 10 mm thick)	n/a

System Sizes

	MOBETRON FOR IORT	CONSOLE	MOBETRON FOR SKIN
WEIGHT - LBS. (KG)	2978 lb (1351 kg)	145 lb (66 kg)	3931 lb (1783 kg)
WIDTH - IN. (CM)	43 in (109 cm)	28 in (71 cm)	43 in (109 cm)
LENGTH - IN. (CM)	88 in (224 cm)	26 in (66 cm)	88 in (224 cm)
TREATMENT HEIGHT - IN. (CM)	99-111 in (252-282 cm)	48 in (122 cm)	98-110 in (249-279 cm)
TRANSPORT HEIGHT - IN. (CM)	78 in (198 cm)	n/a	n/a

Dosimetry

RESOLUTION 1 cGy
REPRODUCIBILITY 1%
LINEARITY 1%

Power

POWER CONSUMED WITH BEAM ON <2 kVA
VOLTAGE 200-240 VAC 50-60 Hz
CURRENT RATING 10A

Ultra-High Dose Rate (UHDR) Mode

ENERGY CONFIGURATION (3 MODES)	6, 9 MeV UHDR 6 or 9 MeV Conv.
PULSE WIDTH (µS)	0.5-4.0
PULSE REPETITION RATE (Hz)	10-120

Accessories

BEAM MONITORING	FLASH-IQ™ Advanced Dosimetry for UHDR
APPLICATOR DIAMETER - ROUND	6, 10 cm
APPLICATOR - SSD	18 cm, 35 cm, 44 cm, 50 cm
APPLICATOR INSERTS - ROUND	2.5 -10 cm
ADD-ONS	Front Pointer, Film Holder, Digital SSD Insert

Dose Rates

	MAX. OUTPUT (Gy/s) 5 CM FIELD SIZE	LARGEST FIELD (Gy/s) 10 CM FIELD SIZE
6 MeV UHDR	>1000	>100
9 MeV UHDR	>1000	>100

Beam Parameters

	6 MeV UHDR	9 MeV UHDR
SURFACE DOSE	>85%	>90%
D _{MAX}	1.2 cm	1.8 cm
R ₉₀	1.7 cm	2.6 cm
R ₈₀	2.0 cm	3.0 cm
R ₅₀	2.5 cm	3.7 cm
R _p	3.0 cm	4.6 cm

Precision Treatment in Microseconds

How Mobetron is Enabling Clinical Translation of FLASH:



Ultra-High Dose Rate



Dynamic Pulse Modulation



Larger Clinical Volumes



Platform Scalability



Simplicity of Electrons



Proven Clinical Platform

INTERESTED IN THE FUTURE OF FLASH?

Learn more about how FLASH with electrons is advancing the future of radiotherapy at [intraop.com](https://www.intraop.com).

UHDR functionality for FLASH radiotherapy is under preclinical research. It is not currently available for clinical use.

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