

MICRO+™ MR Fixed Lasers

Enhance patient alignment workflow and accuracy for diagnostic imaging and radiotherapy.

- New design for serviceability and durability
- Remotely control laser positioning with ease – to an accuracy of 0.15 mm
- Choose from red, green or blue wavelengths
- Includes MRI-compliant power supply kit



MICRO+™ MR supports fixed patient alignment for diagnostic imaging and radiation therapy. Designed with clinical focus, MICRO+ MR increases clinical confidence in alignment accuracy and simplifies your workflow.

Patient-Centered

Laser line widths of ≤ 0.5 mm for all colors (blue, green, or red), and industry-leading lengths of ≥ 4 meters at 3 meters, offer precision and flexibility for your workflow.

Zero Interference™ for MR-Simulation and MR-Guided Radiotherapy

The MICRO+ MR fixed laser system is the patient alignment solution for any MR environment, up to 3 Tesla. System design allows power to pass through a noise filter prior to connecting with each unit, retaining Zero Interference with MR image quality.

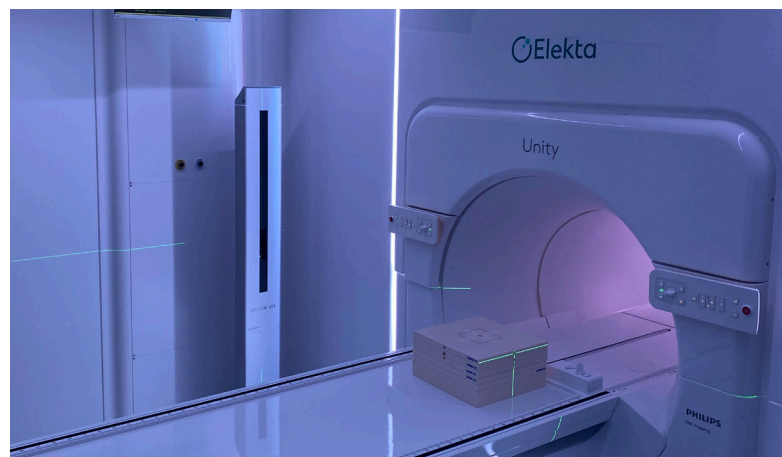
Workflow-Focused

- Reinforced housing offers reliability, and tool-less entry for easy serviceability
- Smart design remote increases efficiency with:
 - Backlighting to help visibility in darkly lit rooms

- Bluetooth technology for intuitive positioning adjustments
- Locator feature for fast finding in case of misplacement
- Service life of 50,000+ hours supports the life of your linac

Easy Implementation

MICRO+ MR lasers mount to the wall and ceiling keeping traditional MR rooms organized. A post-mounted option is available for Elekta Unity MR Linac rooms (field strengths of 3T or less).*



Zero Interference System Offerings

MICRO+ MR systems are available as a 3-unit or 4-unit offering, each with three color options: red, green, or blue. All systems include a power supply designed to convert AC to DC outside of the Faraday cage, cable/connectors to run DC power through the Filter Panel before entering the MR environment, and a Junction Box to distribute DC power to each individual laser unit.

Filter Panel Interface - Planning

Power going into an MR suite is filtered for low frequency noise at the penetration panel. Each site should work with their RF shield designer to ensure a filtered 9-pin D-sub connection is available for lasers at the Penetration Panel. MICRO+ MR includes D-sub connectors to field terminate cables that will pass power through the Panel. Contact your RF shield designer to ensure lasers are included in the site plan.

Specifications

Adjustment Type:	Hand held remote control
Degrees of Movement/ Freedom:	6
Left - Right:	$\geq \pm 15$ mm
Up - Down:	$\geq \pm 15$ mm
Rotation:	$\geq \pm 5^\circ$
Horizontal Tilt (yaw):	$\geq \pm 5^\circ$
Vertical Tilt (pitch):	$\geq \pm 5^\circ$
Focus Range:	1.5 m - 4 m
Adjustment Accuracy:	0.15 mm
Adjustments Speeds:	Slow – Ultra accurate steps (0.15 mm) for each touch of the control Medium - Hold the control for continuous motion Fast – Continue to hold the control for faster speeds and larger movements
Remote Technology:	Bluetooth & infrared
Remote Receiver:	Integrated
Remote Operational Range:	> 10 m
Remote Locator:	“Find remote” option on each laser
Number of Lasers per Remote:	6
Laser Selection:	OneTouch™ automatic laser and remote pairing

Line Width (All Colors):	≤ 0.5 mm for all colors @ 4 m
Line Length:	≥ 4 meter @ 3 m
Laser Type:	Diode
Laser Output:	< 1 mW
Power Supply:	100 – 240 volt (auto select)
Dimensions:	216 mm × 134 mm × 80 mm (H×W×D)
Weight:	< 1 kg
Available Colors:	Wavelength 635 nm Red Wavelength 515 nm Green Wavelength 450 nm Blue
Installation Options:	Wall mount $\pm 45^\circ$ bracket Floor-mounted post Free-standing post kit for Elekta Unity® rooms

Certifications

Complies with Center for Devices and Radiological Health regulations 21 CFR 1040 for Class II lasers and all CE requirements Certified to: IEC 60601 (Safety); IEC 60825-1 (Laser). Sun Nuclear is an ISO13485 certified medical device manufacturer.

**Elekta Unity is a trade name by Elekta AB. Sun Nuclear Corporation is not affiliated with or sponsored by Elekta AB.*