



Meridian Medical latest Nd:YAG laser

your laser specialist





Following the Microruptor's legacy, Meridian Medical's MR Q has been redesigned and replaces the MR6.





SUPERIOR QUALITY & LONGEVITY

Meridian Medical MR Q is a fully-featured and integrated Nd:YAG laser combined with renowned European precision optics. The high-grade aluminum mono-block laser housing gives a unique solid feeling.

The MR Q features a super Gaussian mode laser profile. Its performance and accuracy provide excellent laser treatments. The MR Q internal power meters monitor the energy delivered to enhance patient safety.

The LED slit lamp offers five steps magnification changer, from 6 × to 40 ×. The MR Q's laser cavities are tested under severe conditions, demonstrating outstanding performance.





USABILITY

The MR Q is a fully-featured and powerful Nd:YAG in a compact design.

The MR Q provides unique safety features at every start with electronically controlled anterior and posterior offset.

The laser knobs are ergonomically placed on both sides of the slit lamp. The MR Q features a fully functional slit lamp.



SAFETY

After every treatment, the electronically controlled offset resets to posterior 100 μm , eliminating the risk of inadvertently firing with the wrong offset.

Meridian Medical service team can remotely access the MR Q, adding a unique service delivery method with immediate support.^(*)

(*) world time zone may affect the availability of our technicians





FLEXIBILITY & COMFORT

MR Q is ideal for any practice size. The laser can be installed on an existing height-adjustable evaluation stand as a space-saving stand-alone unit. Meridian Medical offers two motorized tables: a wheelchair-friendly, twin-column table presenting excellent ergonomics for patients and doctors and a single column for small areas.

The ergonomic positioning of the handles on the chinrest guarantees a comfortable sitting position for the patient, thus increasing the patient comfort.

The MR Q couples with the Merilas 532α, 532SP and 577SP lasers, offering a versatile unit for Nd:YAG and photocoagulation treatments.



Sample Image of MR Q with a twin-column table



LASER EXCELLENCE

The history of Meridian AG, now showing up as Meridian Medical Group, and the history of the medical Nd:YAG laser are closely connected. The Microruptor II, developed by Meridian engineers and Prof. Dr. Franz Fankhauser († 2020), changed the way of many ophthalmology treatments.

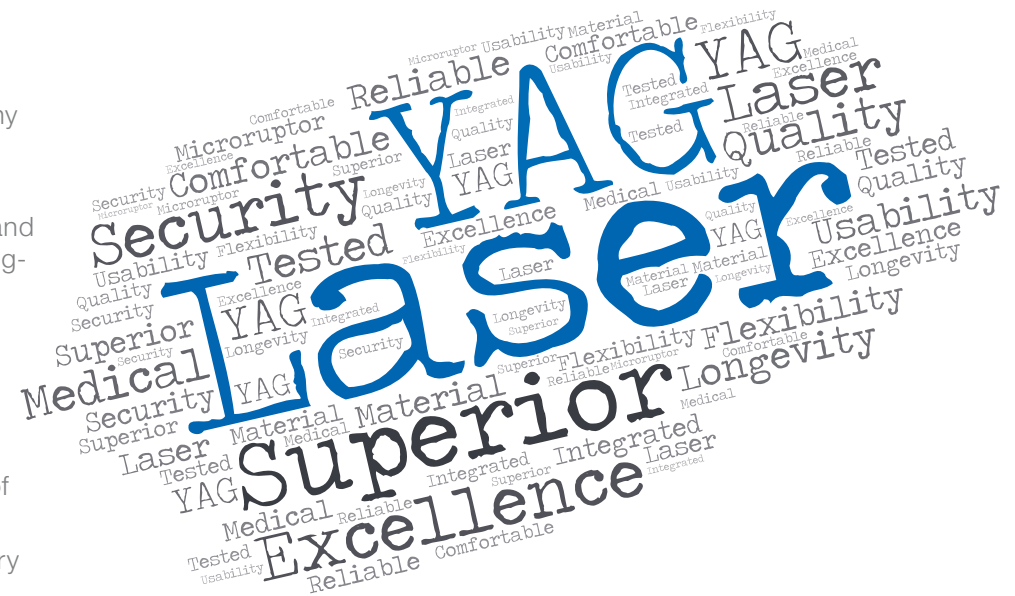
New technology is continuously developed and patented by our development engineers. We select and integrate the best Swiss and European laser components to ensure the highest quality and long-term reliability.

TIPS FOR YOUR LASER

- Yearly maintenance service assures the optimal performance of your laser
- Follow the safety advice of the manufacturer and your regulatory body
- Only use the laser as described in the IFU

CLINICAL INDICATION

For posterior capsulotomy and iridotomy.





STANDARD ACCESSORIES

- Laser safety sign
- Safety goggles
- Dust cover

OPTIONAL ACCESSORIES

- Foot-switch
- Single port beam splitter
- Co-observation tube
- Adapter for 1/2" digital camera



Nd:YAG TREATMENT GUIDELINES*

These guidelines have been prepared following industry standards for Nd:YAG treatments, the use of the laser and its parameters are responsibility of the treating ophthalmologist.

Procedure	Power (mJ)	Offset	Pulses
Posterior Capsulotomy (with lens)	0.9 – 2.0	Posterior 200	Single
Posterior Capsulotomy (w/o lens)	1.4 – 2.5	Posterior 200	Single
Peripheral Iridotomy	3.0 – 5.0	Posterior 100	Double-Triple
Peripheral Iridotomy (plateau iris)	5.0 – 7.0	Posterior 200	Triple

* Weiblinger RP. Review of the clinical literature on the use of the Nd:YAG laser for posterior capsulotomy. J Cataract Refract Surg. 1986 Mar;12(2):162-70.

Nd:YAG OTHER TREATMENTS

Although the MR Q clinical evaluation did not contemplate these parameters, the following are treatments described for Nd:YAG use

Anterior Capsulotomy	0.5 – 1.0	0	Single
Vitreous Strands (anterior)	2.0 – 3.0	Posterior 100	Single
IOL Surface Cleaning	0.3	Anterior 100	Single

* Weiblinger RP. Review of the clinical literature on the use of the Nd:YAG laser for posterior capsulotomy. J Cataract Refract Surg. 1986 Mar;12(2):162-70.



BINOCULARS IN FOCUS


Each user must have the oculars set for their personal refraction, this way the laser will be in parfocality with the aiming beam and retina. Defocused slit lamp may result in unpredictable laser burns.

ABOUT THE OFFSET

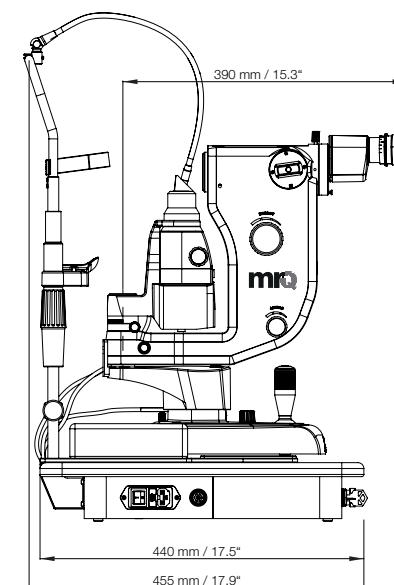
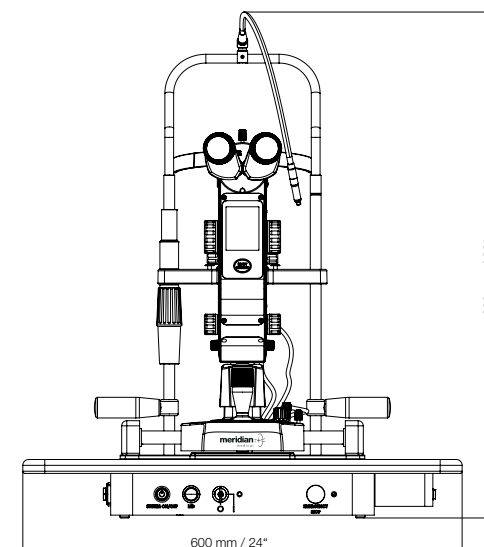
Laser energy travels towards the point of emission (to the front of the eye), when shooting on zero-offset the risk of lens pitting increases. Always check the offset before perform any treatment.



TECHNICAL SPECIFICATIONS*

Device description	MR Q 
Laser source	Q-switched, solid state Nd:YAG 1064 nm
Pulse duration	4 ns
Pulse setting	1, 2 or 3 pulses
Maximum repetition rate	up to 3 Hz
Maximum energy	32 mJ
Treatment spot size	< 10 µm
Cone angle	16°
Treatment beam offset range	Electronically controlled offset, anterior: 150 µm, 300 µm; posterior: 0 µm, 100 µm, 200 µm, 300 µm
Aiming beam	Red diode. Dual beam. 635 nm
Magnification	6 ×; 10 ×; 16 ×; 25 ×; 40 ×
Cooling system	Air cooled
Weight	24 kg / 53 lbs. (unpacked)
Power rating	100 – 240 VAC, 50 / 60 Hz
Power requirements	100 VA

* All technical specifications are subject to change without notice. In accordance with the international laser safety standards: IEC 60601-1:2005 + A1:2012, EN 60601-1-2:2015, MDD 93/42/EEC.





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