

Product catalogue

2022

your laser specialist



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FOREWORD

Laser Excellence

Meridian AG was founded in 1937, and our history is closely linked to the genesis of medical Nd:YAG lasers. The association with Prof. Dr. Franz Fankhauser help in the development of the first commercial Nd:YAG laser for ophthalmology back in 1982: The Microruptor II.

Later in 1994 Meridian AG launched our first Argon laser, the Merilite, in 2006, the first Merilas laser. Later on, as new technologies arise, our engineers developed the shortpulse technology.



In memory of Prof. Dr. Franz Fankhauser, the pioneer of the first commercial Nd:YAG laser in ophthalmology and president of the board of directors of Meridian.

Today Meridian continues expanding its portfolio through proprietary innovations and acquisitions. Meridian selects and integrates the best Swiss and European laser and optical components with three manufacturing facilities across Europe, ensuring the highest quality and long-term reliability.

Meridian products following these principles:

- Superior quality and longevity
- Usability
- Safety
- Flexibility and control

Our highly skilled and experienced staff thrives on delivering the best product service. Our manufacturing standards, best engineering and product integration practices ensure ultimate performance in every system sold. It assures the results our customers expect, always maintaining the safety of the patients as our priority.

SINGLE SPOT – LASER PHOTOCOAGULATORS FOR RETINA AND GLAUCOMA TREATMENT

Superior Quality & Longevity

Meridian lasers are built using a robust aluminium housing, providing protection to the internal components. Our cavities are cooled by a proprietary thermoelectric cooling system, eliminating the need for fans and noises, with the advantage of maintaining the laser output stable and a dust-free system.

Usability

The Merilas lasers feature a fast start – up, allowing immediate access when required. The detachable user interface display has an intuitive design, and its glass technology ensures flexibility and cleanliness at the workplace. The Merilas lasers are fully featured photocoagulators, on a small, compact foot print, and a portable presentation.

Safety

Merilas features separate menu modes to identify continuous wave and short pulse modes quickly

- Double confirmation when switching between laser modes
- Parafoveal laser design – gentle on cornea –

Flexibility & Comfort

Our range of slit lamp delivery systems is compatible with a wide range of slit lamp styles, either Haag-Streit or Zeiss.

- Merilas offers a combo system with Meridian Medical MR Q Nd:YAG. This combination saves space.
- Alternatively, the Merilas family is compatible with Laser Indirect Ophthalmoscopy and endo-probes.

Accessories:

- Microscope filters for Haag-Streit, Zeiss, Leica, Topcon (passive and active)
- External USB fan, recommended when the laser is operating in rooms over 28 degrees Celsius



Merilas shortpulse 810

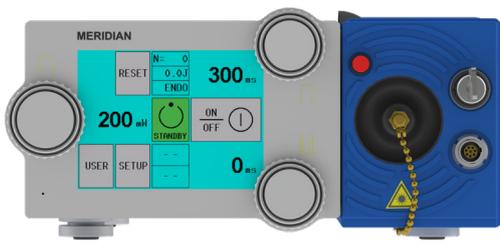


Merilas shortpulse 577



Merilas alpha 532 / shortpulse 532





merilas

α 532

Single spot photocoagulator

Award-winning and fully-featured frequency-doubled solid-state green laser photocoagulator. A compact and practical unit designed for the general ophthalmologist.

Accessories

- Original BQ Haag Streit delivery adapters, fitted by factory trained engineers
- Universal Slit Lamp Adapters with seamless coupling with almost any Zeiss or Haag-Streit style slit lamp

Clinical Indication

- General Retinal Photocoagulation Procedures
- Iridotomy in PACG
- Laser Trabeculoplasty (ALT) in PAOG



merilas

shortpulse 532

Single spot photocoagulator

The Merilas 532 nm is an ophthalmic laser photocoagulator featuring shortpulse, with dual treatment modality: subthreshold or continuous wave. They are designed for efficiency, safety and reliability.

- The shortpulse technology delivers a tissue-sparing solution that allows the tissue to cool between laser pulses, preventing tissue damage, reducing treatment risks, and improving patient comfort and safety
- A versatile array of treatments
- Higher patient comfort due to its lower energy settings

Clinical Indication

- Subthreshold Treatment
- General Retinal Photocoagulation Procedures
- Iridotomy in Angle-closure Glaucoma
- Soft Laser Trabeculoplasty (ALT) with Shortpulse



merilas

shortpulse **577**

Single spot photocoagulator

The Merilas 577 nm is an ophthalmic laser photocoagulator featuring shortpulse, with dual treatment modality: subthreshold or continuous wave. They are designed for efficiency, safety and reliability.

- As the 577 nm is not absorbed by the Xanthophyll, it is the ideal laser wavelength for safer treatment around macula and foveal areas
- The shortpulse technology delivers a tissue-sparing solution that allows the tissue to cool between laser pulses, preventing tissue damage, reducing treatment risks, improving patient comfort and safety due its lower energy settings

Clinical Indication

- Gently Macular Subthreshold Treatment
- All Retinal Photocoagulator Procedures
- Iridotomy in Angle-closure Glaucoma
- Softer Laser Trabeculoplasty (ALT)



merilas

shortpulse **810**

Single spot photocoagulator

The 810 nm wavelength is less absorbed by melanin and haemoglobin. This wavelength has the advantage of penetrating the sclera and excessive haemorrhage, making it ideal for treating the ciliary body, undeveloped newborn retinas and retinal tumour ablations.

Clinical Indication

- Diabetic Retinopathy
- Central Serous Chorioretinopathy
- Diabetic Macular Edema
- Central/Branch Retinal Vein Occlusion
- Retinal Tears, Holes and Detachments
- Retinopathy of the Premature (ROP)
- Retinoblastoma Ablation

Glaucoma and Retina

- Transscleral Cyclophotocoagulation

MULTISPOT LASER PHOTOCOAGULATOR – FOR RETINA TREATMENT

Superior Quality & Longevity

To meet the strict quality requirements for our products, we exclusively use proprietary cavities designed and manufactured in our Meridian Medical facilities. The Merilas laser housing made of robust and resistant material keeps the unit's interior protected and, in a dust-free environment.

Usability

The multispot range features live retinal projection for visibility of laser settings, laser power values, pattern selection, size and rotation without removing the eyes from the binoculars.

- With intuitive laser control through the smart-wheel or touch screen, the TT and 5G provide a fast overview of settings and pattern selection
- Meridian's proprietary smart wheel controller makes the laser operation fast and easy. It allows adjusting most parameters such as laser power, pattern size and rotation
- The advanced features of the laser may help to reduce treatment time and increases patient satisfaction

Safety

To ensure safe and painless treatment, we have implemented various safety features in the system:

- Restricted pattern size
- Fluence calculation combined with spot size control
- Time limit in any pattern less than 0.7 seconds
- Outline projection of patterns to ensure the visibility of both tissues to be treated and spot intensity immediately after delivery
- Restricted total time of pattern delivery

Furthermore, the display shows different automatic reminders built in the system to ensure safe treatment. The height adjustment of the table is blocked when the laser is in "Ready mode".

Flexibility & Comfort

An appropriate choice of a slit lamp (Haag-Streit BM/BQ, Keeler Symphony or CSO slit lamp 9900) is installed and calibrated by our factory-trained service engineers. Specialised designed adapters ensure excellent laser delivery and retina illumination without the need for calibration.



TT 532



5G 532



TT 577





5G532

The 5G photocoagulator is designed to work with the existing slit lamps of the clinic. A fully-featured laser delivers maximum laser quality while allowing mobility and connectivity with different laser delivery accessories.

Easy to use, versatile and mobile.

- Upgradeable to use with LIO and endo-probes
- Compatible with a wide range of slit lamps



tt532

The TT 532 is a multispot laser featuring a functional and modern design with all peripheral components integrated into the table.

The smart-wheel and retinal projection of the set values control make the workflow easy and efficient.

- Excellent laser delivery
- Industry fastest pattern with 1ms between spots
- Appropriate safety features
- Laser console, electronics and computer integrated into a functional and straightforward design
- Factory integration with Haag-Streit BQ and CSO (HS style) slit lamps
- Good accessibility for wheelchairs and patient chairs



tt577

The TT 577 is a multispot shortpulse laser featuring a functional and modern design with all peripheral components integrated into the table.

The smart-wheel and retinal projection of the set values control make the workflow straightforward and efficient.

The shortpulse technology delivers a tissue-sparing solution that allows the tissue to cool between laser pulses, preventing tissue damage, reducing treatment risks, improving patient comfort and safety.

As the 577 nm is not absorbed by the Xanthophyll, it is the ideal laser wavelength for safer treatment around macula and foveal areas

- Ideal setting for retinal specialist, combining the best of Swiss optics with the ideal laser wavelength
- Factory integration with Haag-Streit BQ and CSO (HS style) slit lamps
- Industry fastest pattern with 1 ms between spots
- Appropriate safety features

ND:YAG LASERS – FOR POSTERIOR CAPSULOTOMY, PUPILLARY MEMBRANECTOMY AND IRIDOTOMY

Superior Quality & Longevity

Meridian Nd:YAG lasers are fully-featured units, integrated on state-of-the-art slit lamps with LED illumination, five-fold magnification changer (6x, 10x, 16x, 25x & 40x) and premium precision optics.

The MR Q family is modularly built, and its proprietary laser cavities are tested under stressed conditions, not showing a decline in laser-quality over 600'000 shots.

The laser housing is made of aluminium monobloc, giving a solid feeling when operating the laser head.

Usability

The laser fast start-up time allows immediate use. The control panel is built-in on the body of the laser for easy access. Users can choose between anterior and posterior off-set to optimise the treatments.

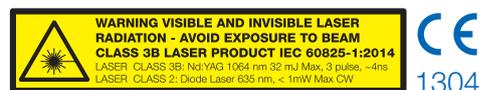
Ergonomic bilateral laser controls allow easy access to the parameters changing.

Safety

- After each use, the laser automatically resets to its default parameters
- Electronic offset controller, the safest offset in any laser
- MR Q features an industry standard two-point red aiming beam focusing system

Flexibility & Comfort

- Remote service capabilities and calibration combo options with Merilas
- Remote service capabilities
- Combo options with Merilas





Meridian MR Q is a fully integrated YAG laser combined with a renowned precision optics LED slit lamp with fivefold magnification changer (6x, 10x, 16x, 25x & 40x).

Clinical Indication

- Posterior Capsulotomy
- Pupillary Membranectomy
- Iridotomy



Meridian offers tables with one or two motorized columns. Both settings ensure an ergonomic sitting position with wheelchair accessibility. For small office rooms, the MR Q is available with a wheelchair accessible motorized single column table.



mrq supine

The only Nd:YAG designed for the operating room

This unique system enables the treatment of paediatric patients or those unable to sit at a slit lamp. The supine position provides the ideal setup for the operating room for patients and staff. In the consulting room, the MR Q supine offers a relaxed environment spa-like to treat your patient, providing the surgeon with a more ergonomic position and making handling contact lenses and eye drops easier.

The MR Q supine allows the treatment of children, the elderly, disabled, anaesthetised patients, and anyone who cannot sit behind a slit lamp for a longer time.

Efficient and smooth workflow:

- Specially designed for operation theatres
- Ergonomic 0-210° inclinable Haag-Streit Surgical binoculars allow comfortable operation
- 4-digit protected PIN code authenticates doctor to use MR Q supine

Clinical Indication

- Posterior Capsulotomy
- Pupillary Membranectomy
- Iridotomy



mrQ

SLT (coming soon)

Latest technology Nd:YAG & SLT laser

Meridian Medical MR Q SLT is a fully integrated Nd:YAG & SLT laser combined with a renowned precision optics LED slit lamp with a magnification range from 6 × up to 40 × selectable in 5 fixed steps. The V-split tower allows coaxial Nd:YAG treatments. This tower produces a red reflex that results in retro illumination of the posterior capsule optimising capsulotomy with a higher degree of safety.

- Ergonomic handles of the chin rest
- Integrated tonometer pin
- Easy to use 7" touch display
- Two-point focusing system

Clinical Indication

- Posterior Capsulotomy
- Pupillary Membranectomy
- Iridotomy
- Selective Laser Trabeculoplasty
- YAG treatments with coaxial illumination

Tips for your laser

- Ongoing preventive maintenance service assures optimal performance of the laser and can early detect laser cavity degradation
- If your electricity grid is unstable, always use a surge protector
- Read the user manual and don't use the laser beyond its intended use and without its capabilities



Head office

Meridian Medical Group

Tel.: +41 33 334 11 11
Fax: +41 33 334 11 19
info@meridian.ch
www.meridian.ch

Switzerland

Meridian AG

Bierigutstrasse 7
CH-3608 Thun

Slovenia

Meridian Medical d.o.o.

Plemljeva ulica 8
1210 Ljubljana-Sentvid

Finland

Meridian Medical Oy

Elannotie 5
01510 Vantaa