

Product catalogue 2020

your laser specialist



INDEX

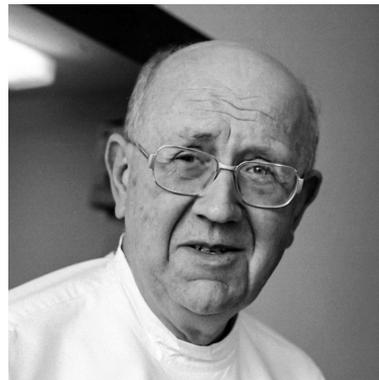
Foreword	3
Laser Excellence	3
Tips for your laser	3
Single spot – laser photocoagulator for Retina and Glaucoma treatment	4
Merilas 532 α – single spot photocoagulator	5
Merilas 532 shortpulse – single spot photocoagulator	5
Merilas 577 shortpulse – single spot photocoagulator	6
Merilas 810 shortpulse – single spot photocoagulator	6
Multispot – laser photocoagulator for Retina treatment	7
5G	8
TT 532	8
TT 577	9
Nd:YAG lasers – for Posterior Capsulotomy, Pupillary Membranectomy and Iridotomy	10
MR Q	11
MR Q Supine	12

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 Frankhauser resulted in the developing of the first commercial Nd:YAG laser for ophthalmology back in 1982: The Microruptor II.

Later in 1994 Meridian AG launched our first frequency doubled Nd:YAG laser Merilite in 2006 the first Merilas laser, later on, as new technologies arise, shortpulse was developed by our in-house engineers.



In memory of Prof. Dr. Franz Frankhauser, the pioneer of the first commercial Nd:YAG laser for ophthalmology in Switzerland.

Today Meridian Medical Group continues developing its portfolio through proprietary innovations and acquisitions. With 3 manufacturing facilities across Europe, Meridian Medical selects and integrates the best Swiss and European laser and optical components ensuring the highest level of quality and long-term reliability.

Meridian products are built following these principles

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

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

SINGLE SPOT – LASER PHOTOCOAGULATORS FOR RETINA AND GLAUCOMA TREATMENT

Superior Quality & Longevity

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

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 a fully featured photocoagulator, on a small, compact, and portable presentation.

Safety

Separate menu modes to easily identify continuous wave and short pulse mode:

- Colour coded laser coupling to match wavelength output
- Stable laser output
- Parfocal laser (this assures no heating on the cornea)

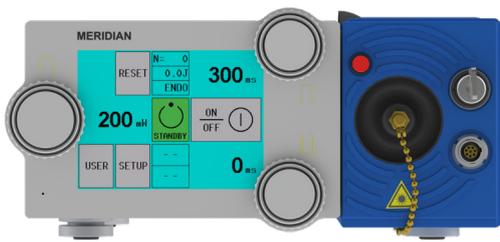
Flexibility & Comfort

Our range of slit lamp delivery systems have been designed to be compatible with a wide range of slit lamps styles, either Haag-Streit or Zeiss. The Merilas lasers can be used with laser indirect ophthalmoscope and endo-probes

Accessories:

- Microscope filters for Haag-Streit, Zeiss, Leica, Topcon (passive and active)
- External USB fan for regions with extreme high temperatures





merilas

α532

Single spot photocoagulator

Award winning, fully featured frequency doubled solid state green laser photocoagulator, compact and practical unit designed for general ophthalmologists.

Accessories

- Slit lamp adapter, laser indirect ophthalmoscope and endoprobes

Clinical Indication:

- All retinal photocoagulator procedures
- Iridotomy in angle closure glaucoma
- Laser Trabeculoplasty in open angle glaucoma



merilas

shortpulse 532

Single spot photocoagulator

The Merilas 532nm shortpulse ophthalmic laser photocoagulator with dual treatment modality: subthreshold or continuous wave delivery mode. Designed for efficiency, safety and reliability.

- Higher patient comfort due to lower treatment parameters
- The shortpulse technology delivers a tissue-sparing solution that allows the tissue to cool between laser pulses, minimizing or preventing tissue damage, reducing treatment risks, and improving patient comfort and safety
- Versatile array of treatments

Clinical indication:

- Subthreshold treatment
- All retinal photocoagulator procedures
- Iridotomy in angle closure glaucoma
- Laser Trabeculoplasty



merilas

shortpulse **577**

Single spot photocoagulator

The Merilas 577nm shortpulse ophthalmic laser photocoagulator with dual treatment modality: subthreshold or continuous wave delivery mode. Designed for efficiency, safety and reliability.

- Safe around macular and foveal treatment
- Shortpulse technology delivers a tissue-sparing solution that allows the tissue to cool between laser pulses, minimizing or preventing tissue damage, reducing treatment risks, and improving patient comfort and safety
- Powerful yellow (577nm) – for best absorption in haemoglobin

Clinical indication:

- Subthreshold treatment
- All retinal photocoagulator procedures
- Iridotomy in angle closure glaucoma
- Laser Trabeculoplasty



merilas

shortpulse **810**

Single spot photocoagulator designed for Glaucoma and Retina

The 810nm wavelength is less absorbed by melanin and haemoglobin. This wavelength has the advantage of penetrating the sclera and excessive haemorrhage.

Retinal photocoagulation with endoprobe:

- Diabetic Retinopathy
- Central Serous Chorioretinopathy
- Diabetic Macular Edema
- Central/Branch Retinal Vein Occlusion
- Retinal Tears, Holes and Detachments

Glaucoma:

- Cyclophotocoagulation



MULTISPOT LASER PHOTOCOAGULATOR – FOR RETINA TREATMENT

Superior Quality & Longevity

To meet the strict quality requirements for our products, we exclusively use our own laser cavities. The housing is made of robust and resistant material.

Usability

Retinal projection of laser settings, values of laser power, pattern selection, size and rotation can be observed without the need of removing the eyes from the binoculars.

- Intuitive laser control with the smart wheel or through its touch screen, provides fast overview of settings and pattern selection
- Our proprietary smart wheel controller makes the laser operation fast and easy. It can be used to adjust most parameters such as laser power, pattern size and rotation
- The advance features of the laser may help to reduce treatment time and increase 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
- 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 slit lamp (Haag-Streit BM/BQ, Keeler Symphony or CSO SL 9900) is installed and calibrated by our professionals. Dedicated adapters ensure excellent retina illumination without the need for calibration.





5G532

The 5G photocoagulator is designed to work with the existing slit lamp of the clinic, as a fully featured laser, it delivers maximum laser quality while allowing mobility and the capabilities of connectivity with different laser delivery accessories.

Easy to move and flexible in use:

- Upgradeable to use with LIO or endoprobes
- Compatible with a wide range of slit lamps



tt532

The TT 532 is a multispot laser, which convinces with its functional and modern design – all components, like laser console, electronics and computer are integrated in the table and are a firm component of the TT 532.

The control via smart wheel and retinal projection of the set values make the work flow easy and efficient.

- Good accessibility for wheelchairs and patient chairs
- Compatible with a wide range of slit lamps
- Stepless adjustable table height for better work ergonomomy



tt577

The TT 577 is a multispot laser, which convinces with its functional and modern design – all components, like laser console, electronics and computer are integrated in the table and are a firm component of the TT 577.

The control via smart wheel and retinal projection of the set values make the work flow easy and efficient.

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

- 577nm laser, preferred by many retina specialists
- Good accessibility for wheelchairs and patient chairs.
- Compatible with a wide range of slit lamps
- Stepless adjustable table height for better work ergonomoy

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

Superior Quality & Longevity

Our Nd:YAG lasers are a fully integrated YAG, equipped with a LED slit lamp, with a magnification range from 6 × up to 40 × selectable in 5 fixed steps and has integrated high quality precision optics.

To meet our high quality standards and ensure longevity, all cavities are subjected to a stress test.

The housing of the laser head is made of a high grade aluminium mono bloc giving the unique solid feeling of Meridian products while moving the laser head.

Usability

The lasers convince by their fast start-up time and easy to use touch display. You can choose between anterior and posterior offset on one screen. This ensures a fast and smooth workflow.

The rotary knobs, such as laser power and aiming beam brightness, are on both sides of the laser head to provide a familiar and comfortable working position for left and right handling.

Safety

We test our units after each assembly for stability and electrical safety in our own laboratories.

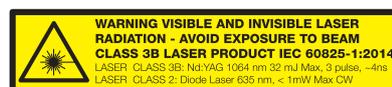
The aiming beam consists of a red two-point focusing system. Energy and off-set reset after each use.

Laser safety goggles and safety signs are delivered by us as standard accessories.

Flexibility & Comfort

Laser triggering is performed with the joystick on the base or optional with a foot switch connected on the left side of the device.

Remote service capabilities and calibration



mrQ

Meridian MR Q is a fully integrated YAG laser combined with a renowned precision optics LED slit lamp with a magnification range from 6 × up to 40 × selectable in 5 fixed steps.

For small practice rooms, the MR Q is available as a space-saving unit with a small table.

Clinical Indication:

- Posterior Capsulotomy
- Pupillary Membranectomy
- Iridotomy



Optionally we offer a motorized, two column table, which ensures an ergonomic sitting position through the special positioning of the handles and is easily accessible for wheelchairs.



mrq supine

A revolution of Nd:YAG treatment

The supine position is more relaxing for the patient, especially during lengthy procedures.

It provides the surgeon with a more ergonomic position and makes the handling of contact lenses and eye drops easier. Above all, it allows the treatment of children, the elderly, handicapped, anaesthetized patients and patients who are not able to sit behind a slit lamp for a long time.

Another great advantage of the supine position is that very nervous patients feel more relaxed in the supine position and can be calmed down more easily by the medical staff.

Efficient and smooth workflow:

- The patient can already be prepared on the treatment table before the treatment and only has to be placed under the laser. The time-consuming positioning of the head on the chin rest and adjusting the correct height is no longer necessary.
- Another advantage is that the time-consuming cleaning of the chin rest is no longer necessary after each treatment because the patient does not touch the laser system. This allows clinics with high patient volumes to work more efficiently.
- 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

Tips for your laser

- Not using your laser over a longer time will reduce the lifetime.
- Damage that may occur if the laser is not used for a longer period of time may affect the following parts: Beam shutter, IVO crystals, optics (cracks after high energy start-up). This damage is not position-dependent and can also occur in the installed state if the entire device is not used for a longer period of time.
- Store the laser in the supplied case if the laser is not used for a long time.
- A regular cleaning ensures stable operation of the laser.



Switzerland

Meridian AG
Biergutstrasse 7
CH-3608 Thun

Contact

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

Slovenia

Meridian Medical d.o.o
Plemljeva 8
1210 Ljubljana

Finland

Valon Lasers Oy
Elannotie 5
01510 Vantaa