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α532

Green laser photocoagulator

for all retinal photo-coagulator procedures

your laser specialist

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PROVEN RELIABILITY – COMPACT, PRACTICAL AND POWERFUL

Award winning, fully featured frequency doubled solid state green laser photocoagulator.

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SUPERIOR QUALITY & LONGEVITY

The Merilas housing is made of a high grade aluminium giving Meridian's unique solid feeling. The removable control panel features a crystal interface that is resistant, durable and easy to clean.

The thermoelectric cooling (TEC) system eliminates the need for ventilation slots, making a hermetically sealed unit, ensuring a dust-free system, increasing the longevity of the laser.

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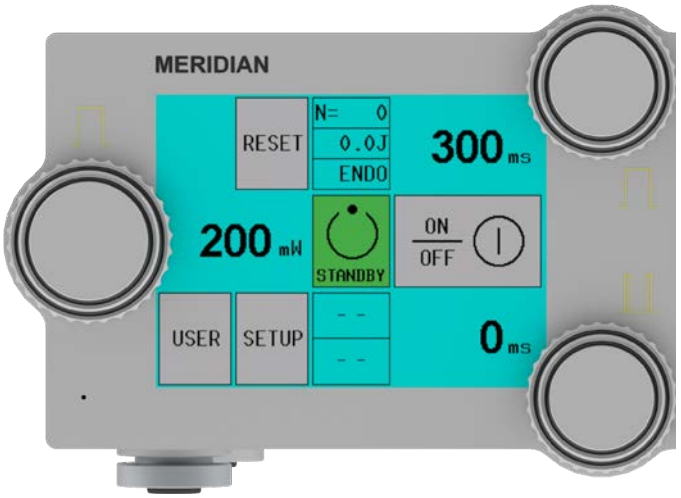

USABILITY

The Merilas lasers have intuitive commands, and are easy to use

The detachable touch display with glass technology ensures flexibility and provides a greater ergonomic design. The user interface is straightforward to use, thanks to its intuitive design. Due to its thermoelectric cooling system, there are no disturbing noises or air turbulences.

The Merilas lasers impress users with their modern, compact presentation and ease to transport. Each laser comes with a robust and practical carry-on case.

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SAFETY

Auto Key connector: Merilas lasers recognises the original probes and accessories connected to the console.

- Meridian cavities deliver stable laser output
- Each laser accessory is calibrated and measured independently
- Meridian parfocal laser (this assures no heating on the cornea)
- Remote support access

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FLEXIBILITY & COMFORT

Our range of slit lamp delivery systems are designed to work with a wide range of slit lamp brands, either Haag-Streit or Zeiss styles. The Merilas lasers can be used with laser indirect ophthalmoscopes and endoprobes.

Our technicians can support you via remote service in case you need assistance. This function allows fast and professional troubleshooting.

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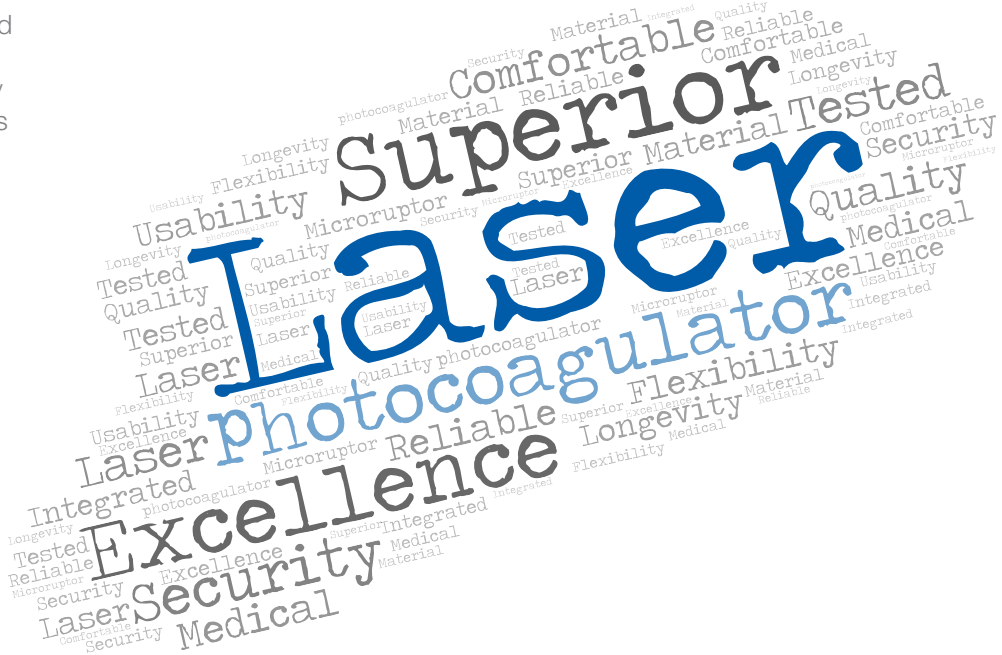
LASER EXCELLENCE

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 Dr Frankhauser 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. We use tested and reliable best practices in engineering and integration, ensuring our systems' highest performance. Our highly skilled and experienced staff works to deliver the service and results our customers deserve and have come to expect.



TIPS FOR YOUR LASER

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

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CLINICAL INDICATION

Photocoagulation:
Retinal photocoagulation, panretinal photocoagulation (PR) and intravitreal endo-photocoagulation of vascular and structural abnormalities of the retina and choroids, including:

- Proliferative and non-proliferative diabetic retinopathy
- Choroidal neovascularization
- Branch retinal vein occlusion
- Age-related macular degeneration
- Retinal tears and detachments
- Retinopathy of prematurity
- Macular edema
- Lattice degeneration
- Central retinal vein occlusion

Iridotomy:

- Iridotomy in angle closure glaucoma

Trabeculoplasty:

- Trabeculoplasty in open angle glaucoma

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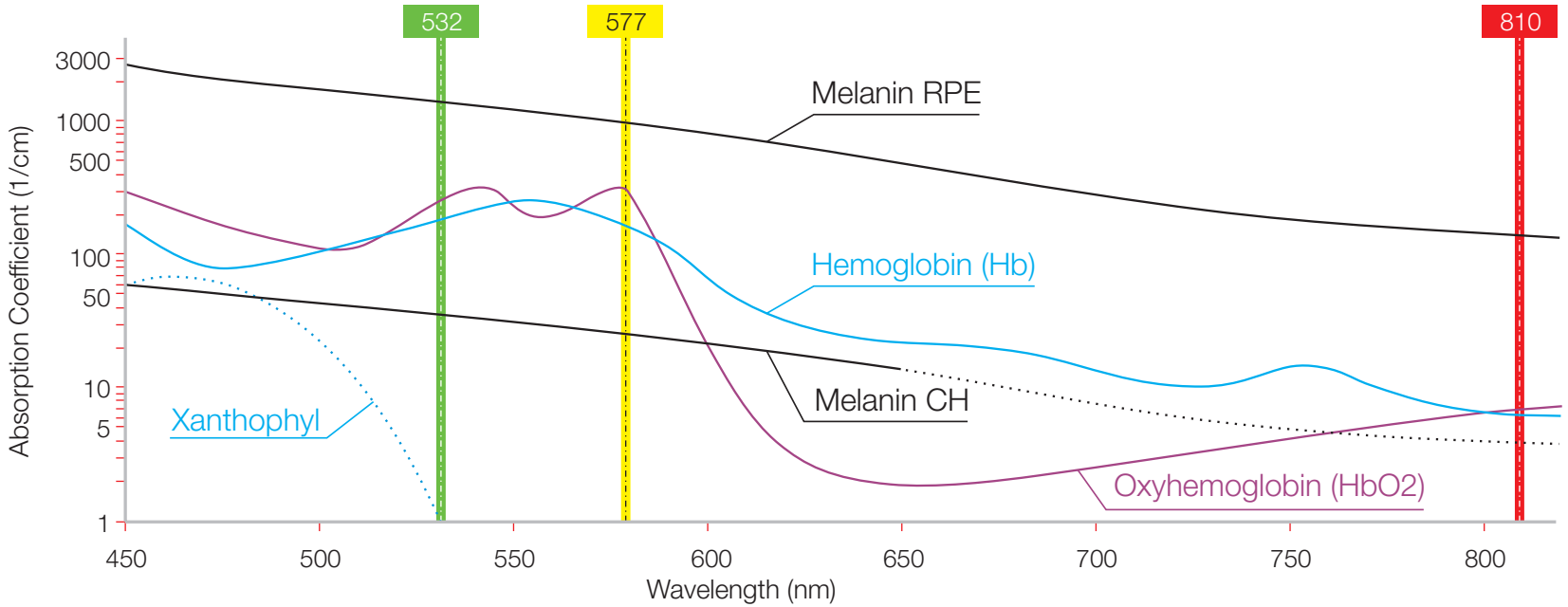
WAVELENGTH BENEFITS – WHY 532 nm?

- The green light is best absorbed by the pigment melanin and is therefore suitable for various retinal treatments, especially of the pigmented retinal epithelium (RPE)



PHOTOCOAGULATION – TREATMENT GUIDELINES FOR CW LASERS

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

Procedure	Spot size(*)	Exposure	Power	Visible effect
PRP (Central)	100 – 200 µm	0.05 – 0.2 S	100 mW	Moderate Burning
PRP (Periphery)	200 – 500 µm	0.05 – 0.5 S	400 mW	Blanching
DME (Focal)	50 – 100 µm	0.05 – 0.1 S	100 mW	Light Blanching Within 500µm of fovea
DME (Grid)	50 – 200 µm	0.1 S	100 mW	Blanching
RVO	100 – 500 µm	0.05 – 0.5 S	100 – 500 mW	Intense burn
CNV	50 – 200 µm	0.1 – 0.5 S	100 – 500 mW	
Tears & Breaks	50 – 1000 µm	0.2 – 0.5 S	400 – 600 mw	Linear with no spacing
Degenerations	500 – 800 µm	0.1 – 0.2 S	400 – 600 mw	Linear with no spacing

(*) Spot size on macula including the lens magnification factor
Suggested parameters for the Posterior Segment taken from Bloom & Bruckner (1997) "Laser Surgery of the Posterior Segment"

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.

TEST SHOTS

- Always assure perfect retinal focus before delivering the treatment
- Perform a series of SINGLE SPOT shots in the periphery to test the melanin response, for your test shot aim for a blanching or light burn
- Start with the lowest recommending power and the shortest exposure time

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STANDARD ACCESSORIES

- Foot switch
- Transport case
- Safety goggles

OPTIONAL ACCESSORIES

- Slit lamp adapters
- Laser indirect ophthalmoscope
- Safety filters (passive & active)
- Endoprobes
- External fan

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SLIT LAMP ADAPTER – HAAG-STREIT BQ INTEGRATED DESIGN

Meridian proudly integrates its lasers to the Haag-Streit BQ, and it is the only laser company partnering with Haag-Streit.
The specially designed, high-quality filter for the Haag-Streit BQ, fits perfectly on this slit lamp, providing an uninterrupted view and access to the slit lamp on 577 or 532 nm wavelengths. Meridian filters provide unparallel light transmission with protecting the user's eyes.

HAAG-STREIT UNIVERSAL DESIGN

Merilas universal slit lamp adapter allows coupling with almost any Haag-Streit slit lamp, original or copy.
The adaptor has multiple moving parts to assure excellent adaptability to the many Haag-Streit style slit lamps, the robust material enclosing the fibre ensures its durability.

SLIT LAMP ADAPTER – ZEISS STYLE SLIT LAMP ADAPTER

Meridian offers a Zeiss-style slit lamp adapter designed for the lower illumination tower, allowing seamless interaction with the German slit lamp and lasers like the Nd:YAG MR Q.

DELIVERY SYSTEMS – LIO – FEATURES

- Optimized for the Merilas platform
- Laser delivery coaxial to the users viewing axis
- Standard LED module
- Neutral LED cooler color providing brighter illumination and longer battery life
- High-contrast optics
- Built-in filters
- Intelligent optical system with automatic optics and mirrors adjustment
- High magnification lens with additional 1.6 x magnification

DELIVERY SYSTEMS – LIO – TECHNICAL SPECIFICATIONS

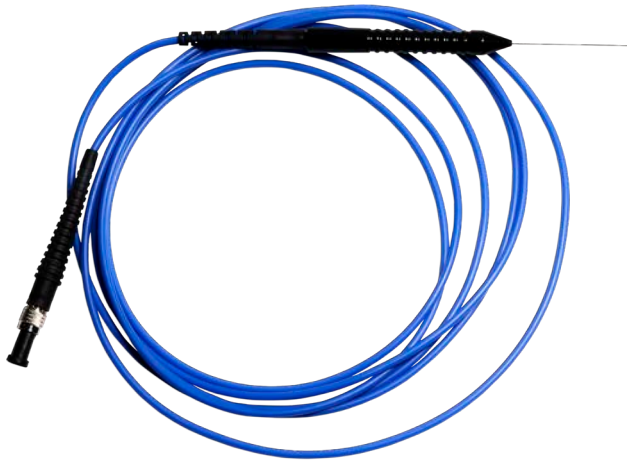
Description	Mode
Spot size	1100um ± 20%
Working distance (front of LIO to focused spot)	280mm ± 20%
Operating wavelengths (Factory configured to one therapy wavelength	Therapy laser: 532 nm, 577 nm or 810 nm up to 2000 mW pulsed Aiming laser: 635 nm, 1 mW
Back-scatter protection	OD > 5.5 at therapy wavelength
Laser Fiber	100 µm core, multimode with A/R coating 3 mm stainless steel protected 5 m length SMA905 laser termination
Power Source	Wall mounted wireless charger including spare lithium battery

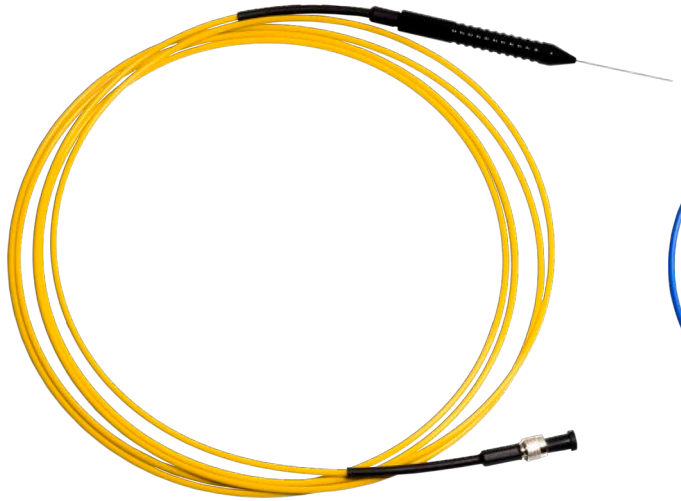
DELIVERY SYSTEMS – PROBES –

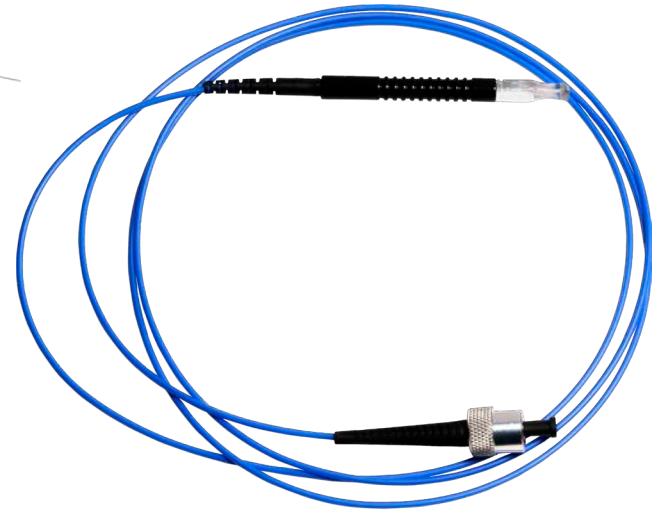
Our probes are manufactured by EMTRON, following strict quality control. The high-quality polished fibre surfaces result in homogenous laser spots with evenly distributed power across the entire area, eliminating the potential risk for the formation of “hot spots” in the treatment area.

SAFETY

The endo probes enjoy unique features such as unique serial numbers assuring the highest possible traceability. All endo probes are CE-marked and individually sterilized for single use.



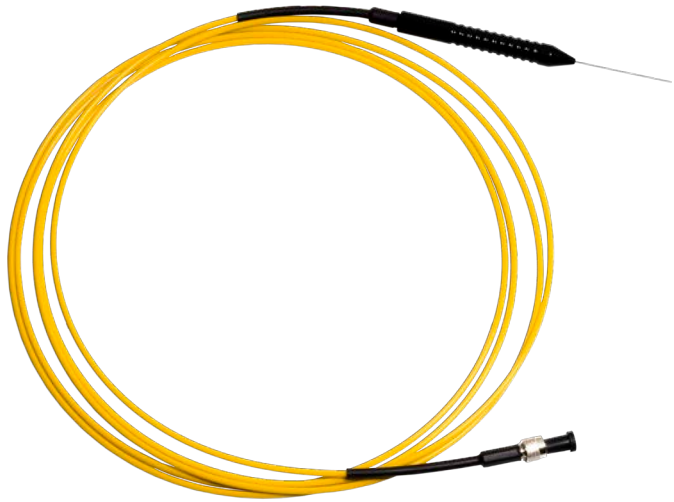


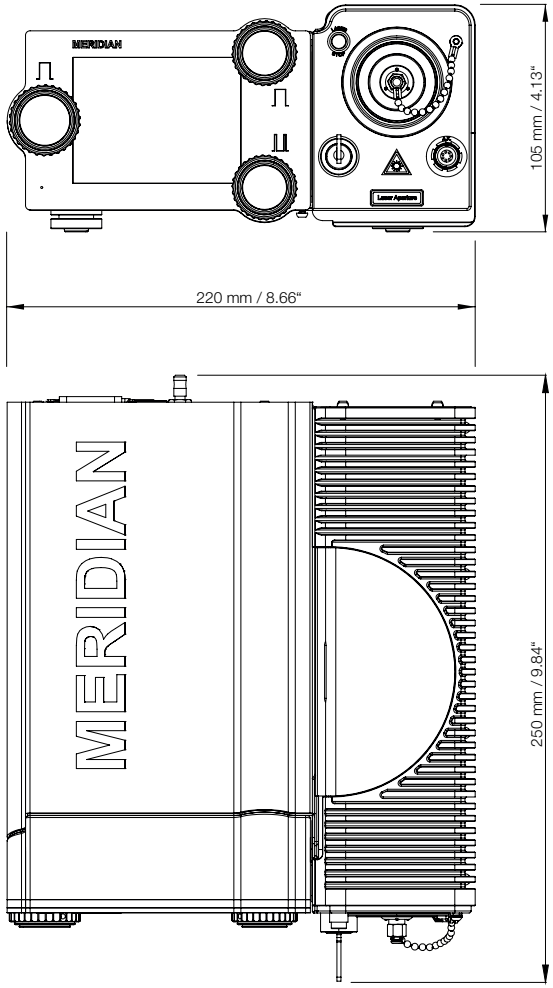


DELIVERY SYSTEMS – AVAILABLE PROBES –

The probe design incorporates a proprietary ergonomic design, resulting in a comfortable grip. The handpiece is well balanced for precise and safe fibre guidance resulting in unsurpassed treatment precision. The laser port is a standard SMA connector, providing users with a higher degree of versatility.

	Treatment	Description





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TECHNICAL SPECIFICATIONS*

Device description	Merilas 532 alpha | merilas α532
Safety Classifications	Class 4
Wavelength	532 nm
Power Output	50 – 2000 mW
Pulse Duration	10 ms – 5 000 ms
Pulse Interval	10 ms – 5 000 ms
Cooling	TEC
Aiming Beam	Diode 635 nm, (0-1 mW in 9 Steps)
Dimensions	25.0 x 22.0 x 10.5 cm
Total Weight	7.0 kg
Power Requirements	100 – 240 V, 50/60 Hz, 2 A max.

* All technical specifications are subject to change without notice. In accordance with the international general safety standards: IEC 60601-1:2005/AMD1:2012,, IEC 60601-1-2:2014, MDD 93/42/EEC. The laser safety is in accordance with the international standards: IEC 60825-1:2014 and IEC 60601-2-22:2007/AMD1:2012.

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