KLS martin GROUP

marLase Pro®

Precision you trust, safety you rely on.

FOCUS OPEN 2025
Internationaler Designpreis
Baden-Württemberg
Special Mention

www.klsmartin.com

Together with our customers, we are committed to innovating reliable and trendsetting energy-based surgical solutions. Every day, we passionately work on developing products and services that assist in optimizing clinical results which contribute to the well-being of the patient.

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marLase Pro®

From ENT and gynecology to dermatology – a laser that perfectly adapts to you.

The marLase Pro® CO_2 laser system delivers precise, low-bleeding, and tissue-sparing treatment for a wide range of surgical applications. Its intuitive interface offers indication-specific programs and unique laser modes for tailored tissue effects – ideal for gynecology, ENT, and dermatology.

Safety is enhanced through acoustic status announcements like “Laser ready” / “Laser standby”, ensuring all OR personnel are informed about the current status. A digital OR logbook records procedures for traceability. Onboard video animations provide direct guidance on system handling and clinical applications.

With excellent beam quality and precise control, the marLase Pro® ensures accurate and gentle treatment. A built-in damping system maintains long-term optical stability, while the air-cooled RF tube reduces maintenance. The system is plug and play – ready to use upon delivery.

Optional accessories expand functionality:
The latest scanner technology enables area-wide laser application with all scan patterns. The all-new MicroPoint® 3S micromanipulator offers a wide range of adapter plates ensuring compatibility with microscopes and colposcopes from various manufacturers, making the marLase Pro® a flexible and powerful solution for modern laser surgery.

The MicroSwitch joystick of the MicroPoint® 3S allows real-time curvature and rotation of the laser line directly by the surgeon. The unique automatic focal length detection ensures correct energy density settings, preventing errors. A compact design and improved focus depth offer more working space and reduce the need for refocusing.

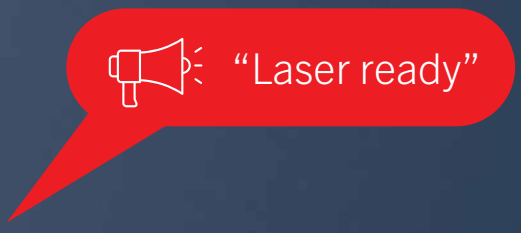
- ☑ **Precision**
- ☑ **Safety**
- ☑ **Versatility**

Next generation CO_2 laser

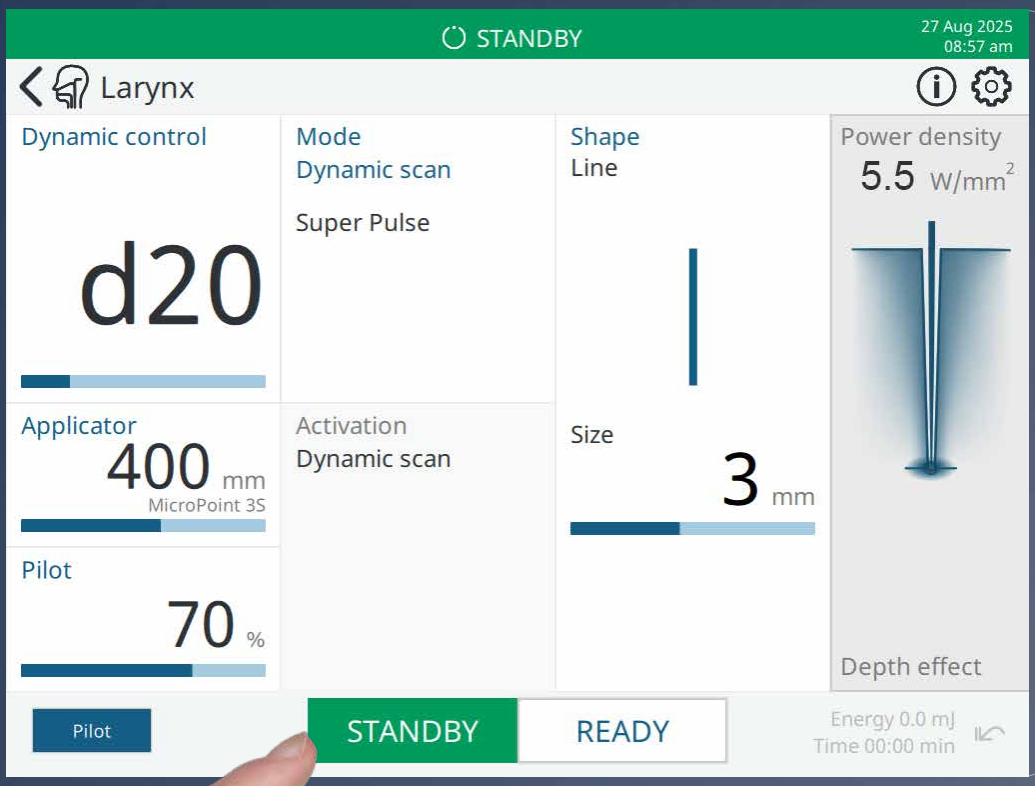
The marLase Pro® is KLS Martin's innovative high-end laser platform for surgical and aesthetic CO_2 laser procedures.

Benefits

- Outstanding beam quality and precision
- Broad range of tissue effects and clinical applications
- Intuitive user interface with indication specific programs
- Highest safety standards by acoustic announcement of the laser mode
- Video animations of handling viewable on the screen
- Low-noise and maintenance-free air cooling
- Permanently stable optics due to sophisticated damping system
- Full range of innovative accessories



CO_2 – the all-round laser system in surgery and aesthetics



The CO_2 laser is the classic surgical laser. It has been used in numerous medical applications with great success for over three decades. With the all-new CO_2 laser marLase Pro®, KLS Martin offers state-of-the-art, cutting-edge laser technology.

Its modern and user-friendly operating philosophy, its excellent optical properties or the comprehensive, innovative range of accessories – the marLase Pro® gives you lots of reasons to decide in favor of a KLS Martin CO_2 laser.


marLase Pro
KLS martin
STANDBY
Larynx
Dynamic control
d20
Mode
Dynamic scan
Super Pulse
Shape
Line
Power density
5.5 W/mm²
Applicator
400 mm
Activation
Dynamic scan
Size
3 mm
Pilot
70 %
Depth effect
STANDBY
READY

Brand new and innovative laser modes

The unique laser modes offer various thermal effects to treat the target tissue always at the appropriate temperature level in every surgical situation. Never before has the surgeon been able to select between such a big variety of different temperature levels.

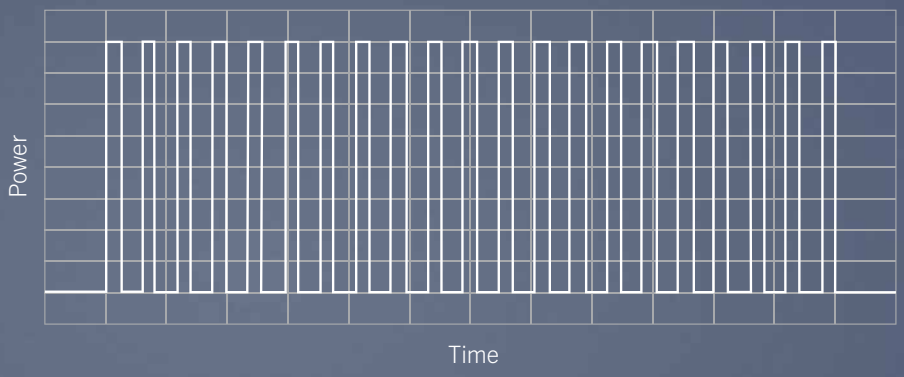
SuperPulse

SuperPulse-x

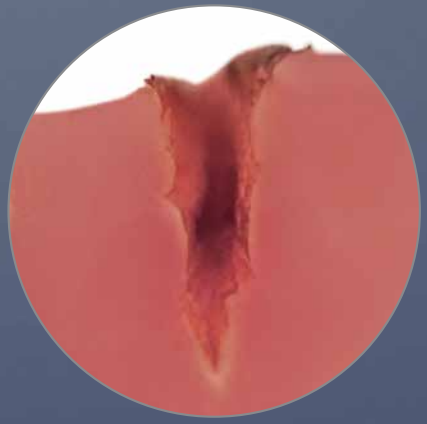
CW super cold

Cold

SuperPulse- / SuperPulse-x-Mode:



Atraumatic and low thermal damage



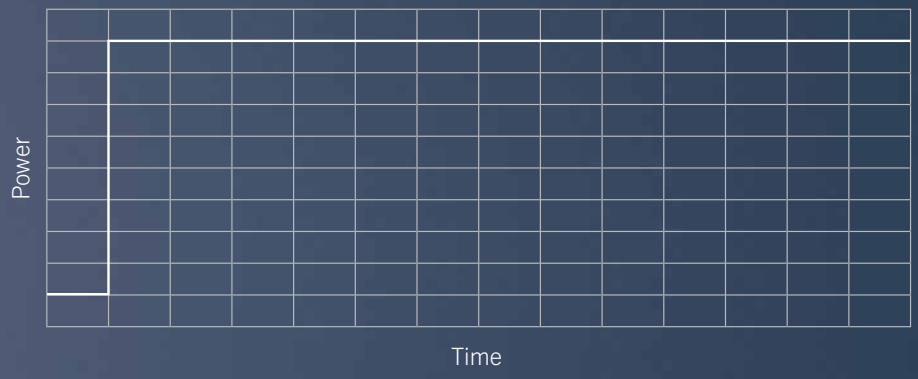
CW cold

CW thermal

CW

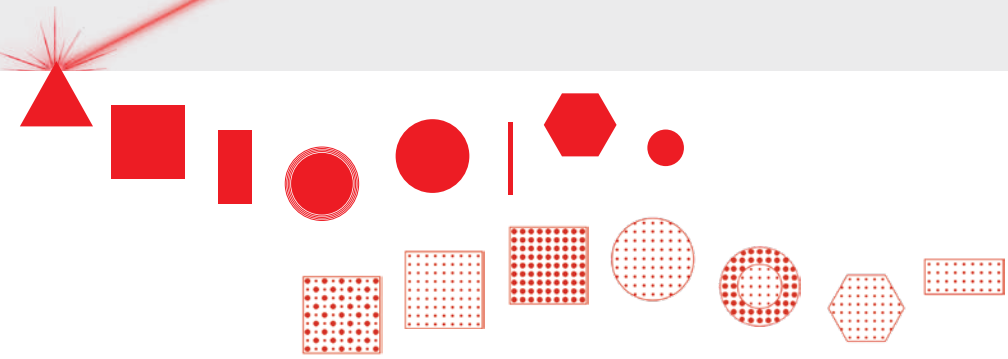
Hot

CW-Mode:



Stronger haemostatic effect
and more coagulation

marScan Pro – maximum control of tissue ablation

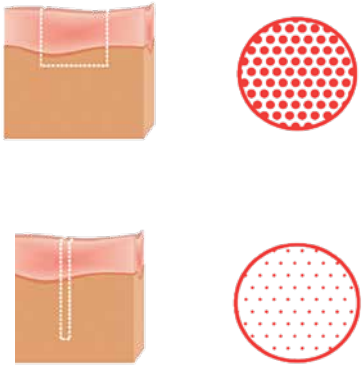


The digital scanner system marScan Pro comes as an integrated part of the marLase Pro® S-variant. It offers controlled homogeneous and reproducible tissue ablation for use in numerous surgical fields – gentle, tissue-sparing laser application for the benefit of the patient. Only one scanner handpiece for surgical and aesthetic procedures for both, ablative and fractional scanning.

Fractional scan
The innovative fractional scan offers gentle skin treatments. The large scan figures and the fast-working scanner save valuable treatment time. The new possibility to mix Softfrac and Powerfrac allows a better adaption to the individual situation of the patient.

Ablative scan mode

Fractional scan mode



Versatility in laparoscopic procedures

In preparation

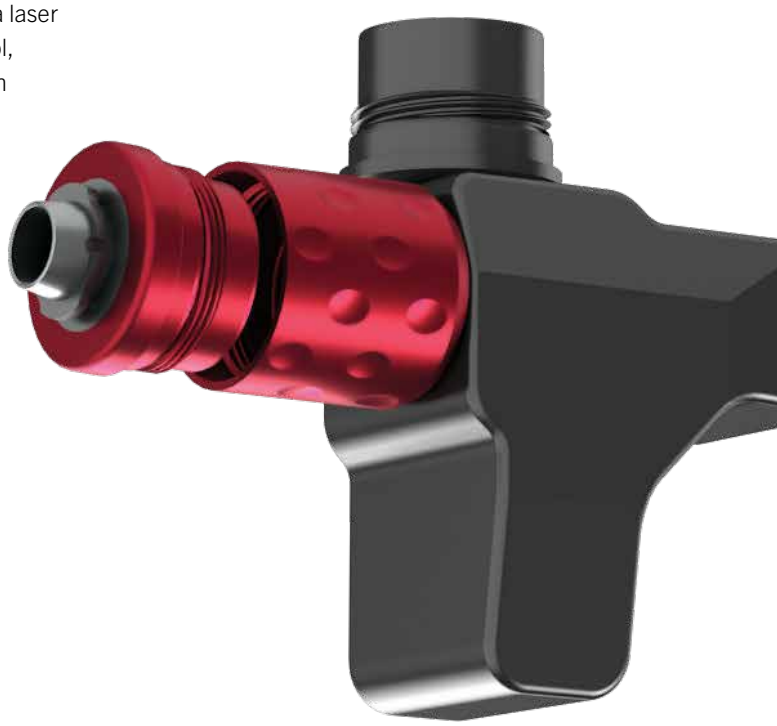
The marCoupler red revolutionizes laparoscopic surgery by integrating the precision of CO_2 laser technology into laparoscopic procedures. Designed specifically for the combination with a laser laparoscope, this innovative device offers unmatched control, speed, and gentleness – ensuring optimal outcomes for both surgeons and patients.

The marCoupler red (77-470-00-04) allows a laparoscopic use of the laser:

- ☑ **Fast and gentle laser application:**
  Enables precise and efficient tissue treatment with minimal thermal damage – ideal for delicate laparoscopic procedures.

- ☑ **Flexible laser modes:**
  Offers both focused laser spot for pinpoint accuracy and scan figures for a larger tissue area, adapting to surgical needs.

- ☑ **Optimized for endometriosis:**
  Designed for safe and effective excision or vaporization of endometriotic lesions.



marCoupler red
77-470-00-04

Product not yet available.
Technical product changes possible.

MicroPoint® 3/3S – precision you can feel.

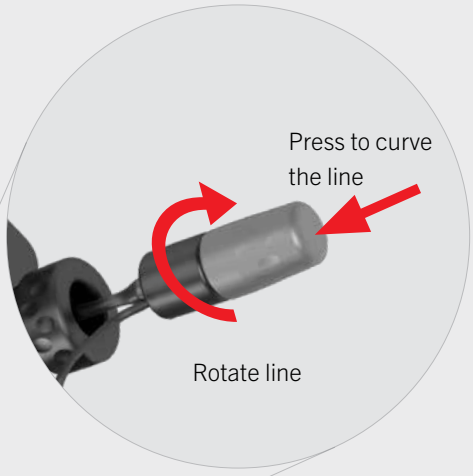
MicroPoint® 3

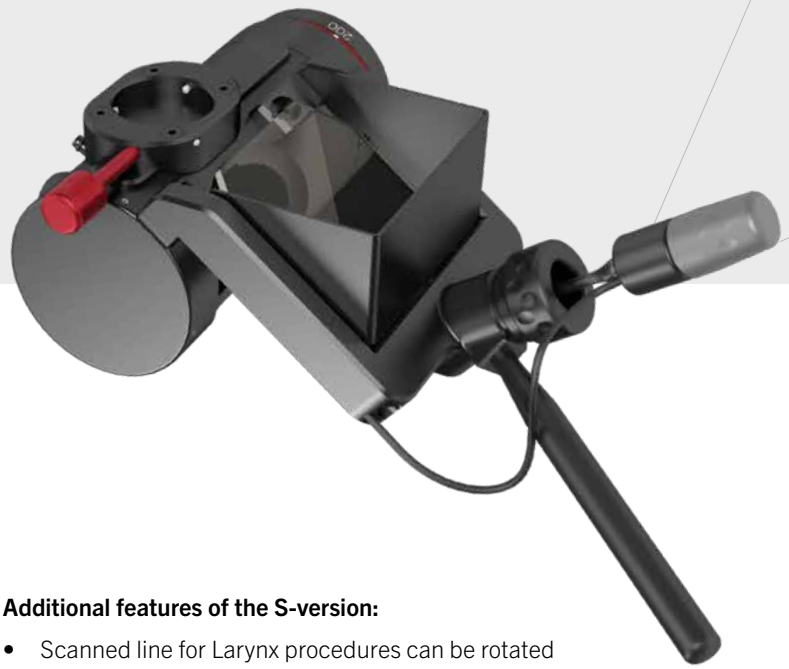
- Brand new micromanipulator for ENT and gynecology
- Increased focus depth resulting in less refocusing
- Compact design
- Secure adaptation thanks to bayonet lock and additional locking screw
- Large mirror offers a wide field of vision
- Adapter plates for all common microscopes and colposcopes available
- 5x higher focusing depth, less refocusing necessary (see page 23)

MicroPoint® 3S

MicroSwitch integrated into the joystick:

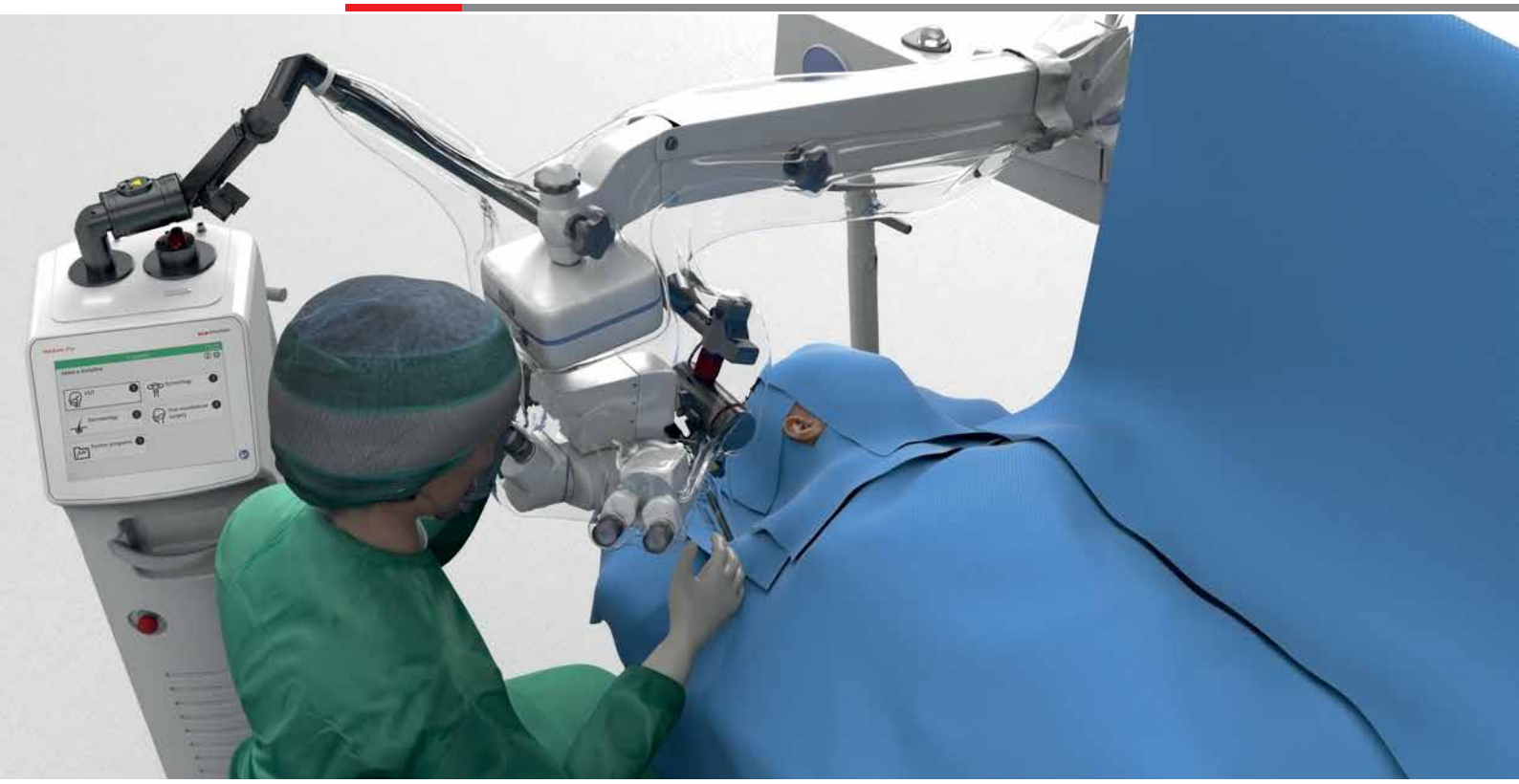
- Micromanipulator especially for ENT
- Easy and quick line curvature and rotation directly on the joystick by the surgeon





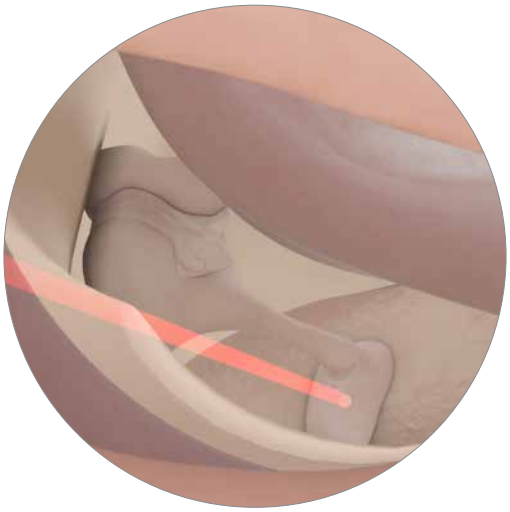
Additional features of the S-version:

- Scanned line for Larynx procedures can be rotated and bended directly via joystick
- Electronic detection of the focal length and transmission to the laser



Stapes surgery – finest laser technology for the finest structures:

- ☑ **Contactless precision:** Non-contact cutting without mechanical stress – for maximum accuracy.
- ☑ **Fewer complications:** Targeted energy delivery minimizes the risk of perilymph leakage and inner ear damage.
- ☑ **Consistent results:** Scanner technology ensures equal and controlled perforations of the footplate.
- ☑ **Efficient procedure:** Fewer laser shots shorten surgery time and reduce patient strain.



marLase Pro®

Intuitive user interface with indication specific programs

Offers pre-configured laser settings tailored to specific medical indications.

Simplifies operation, reduces preparation time, and ensures consistent, high-quality results across a wide range of clinical applications.

New, unique laser modes/effects

Broader range of thermal tissue interactions by adjusting parameters like energy density, scanner speed and power.

Enables highly customized treatment strategies for different tissue types and surgical goals – improving precision, reducing collateral damage, and enhancing clinical outcomes.

Acoustic announcement of the laser mode

Provides voice prompts indicating the laser's operational status ("Laser standby" or "Laser ready").

Enhances safety by ensuring all OR personnel are aware of the laser's status, reducing the risk of accidental laser radiation exposure and improving workflow coordination.

Large 10.4" color touchscreen

Provides a clear, high-resolution display with touch navigation for accessing laser settings and programs.

Enhances usability and workflow efficiency, allowing quick adjustments and reducing the risk of user error during procedures.

Video animations about handling and selected clinical applications

Provides step-by-step visual guides directly on the laser display for system setup, operation, and specific surgical procedures.

Enhances user confidence and safety, supports just-in-time learning in the OR, and ensures consistent, correct use of the system even by less experienced staff.

Digital OR-logbook

Automatically records details of completed surgical procedures, including laser energy and usage data.

Facilitates traceability and documentation, supports quality assurance, and provides valuable insights for maintenance and service planning.

Outstanding beam quality and precise control

Delivers a stable, high-focus laser beam with fine-tuned energy delivery and minimal divergence.

Enables highly accurate, tissue-sparing procedures with improved safety and superior clinical outcomes, especially in delicate or deep surgical fields.

Permanently stable optics due to sophisticated damping system

Absorbs vibrations and mechanical stress within the device to maintain precise alignment of optical components.

Ensures long-term laser accuracy and reliability, reducing the need for technical service and recalibration, enhancing overall device safety and performance.

Innovative RF-technology with air-cooled metal tube

Uses an integrated air-cooling system to regulate the temperature of the RF-excited laser tube, eliminating the need for complex water-cooling systems.

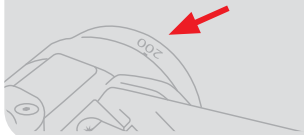
Reduces maintenance requirements and downtime, increases system reliability, and lowers total cost of ownership. RF metal tube results in longer lifetime and higher power output stability.

MicroPoint® 3 and **MicroPoint**® 3S

Electronic detection of the focal length and transmission to the laser

Automatically detects the set focal length and transmits it to the laser system in real time, triggering an immediate recalculation of the energy density.

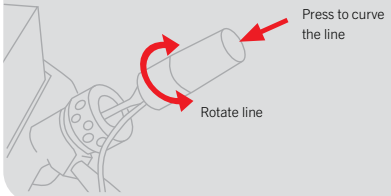
Eliminates the need for manual input on the laser, prevents incorrect settings, and ensures precise, safe, and efficient laser application during surgery.



MicroSwitch integrated in joystick

Allows direct curvature and rotation of the laser line via joystick by the surgeon – no need to adjust settings on the laser display.

Speeds up workflow and enhances precision by enabling intuitive, real-time control during surgery.



More compact design and increased focus depth

Provides more working space in the surgical field and reduces the need for frequent refocusing.

Enhances surgical precision and efficiency, especially in confined or variable-depth anatomical areas.

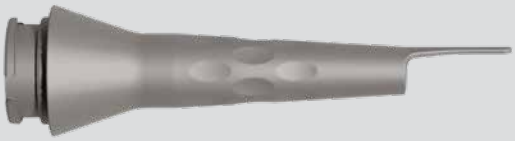
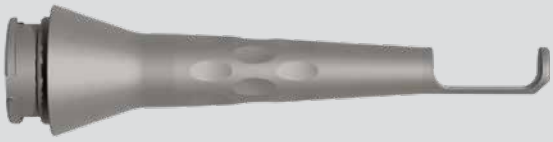
Broad range of adapter plates

Enables secure attachment of the micromanipulator to various surgical microscopes and colposcopes from different manufacturers.

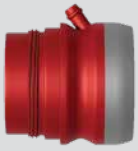
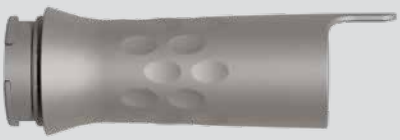
Maximizes compatibility and flexibility in diverse clinical environments, allowing seamless integration into existing OR infrastructure.

Focusing handpieces

marFocus yellow		**Art. No.**
	marFocus yellow optics	77-400-00-04
	marFocus yellow spatium tube	77-400-10-04

marFocus grey		**Art. No.**
	marFocus grey optics	77-410-00-04
	marFocus grey spatium tube	77-410-10-04
	marFocus grey tube backstop	77-410-20-04

marFocus blue		Art. No.
	marFocus blue optics	77-420-00-04
	marFocus blue spatium tube	77-420-10-04
	marFocus blue spatium backstop	77-420-20-04
	marFocus blue tube 90°	77-420-30-04

marScan grey		Art. No.
	marScan grey optics	77-450-00-04
	marScan grey spatium tube	77-450-10-04

Ordering and technical data
Laser units and accessories

KLS Martin CO_2 laser marLase Pro® 30	
Consisting of basic unit (30 W), articulated (mirror-joint) arm, power cord, foot switch	77-130-01-04
KLS Martin CO_2 laser marLase Pro® 30 S	
Consisting of basic unit (30 W) with scanner, articulated (mirror-joint) arm, power cord, foot switch	77-130-11-04
KLS Martin CO_2 laser marLase Pro® 60	
Consisting of basic unit (60 W), articulated (mirror-joint) arm, power cord, foot switch	77-160-01-04
KLS Martin CO_2 laser marLase Pro® 60 S	
Consisting of basic unit (60 W) with scanner, articulated (mirror-joint) arm, power cord, foot switch	77-160-11-04
General accessories	
marFocus yellow focusing handpiece (50 mm) consisting of:	
marFocus yellow optics	77-400-00-04
marFocus yellow spatium tube	77-400-10-04
marFocus grey focusing handpiece (100 mm) consisting of:	
marFocus grey optics	77-410-00-04
marFocus grey spatium tube	77-410-10-04
or	
marFocus grey optics	77-410-00-04
marFocus grey tube backstop	77-410-20-04
marFocus blue focusing handpiece (200 mm) consisting of:	
marFocus blue optics	77-420-00-04
marFocus blue spatium tube	77-420-10-04
or	
marFocus blue optics	77-420-00-04
marFocus blue tube backstop	77-420-20-04
or	
marFocus blue optics	77-420-00-04
marFocus blue tube 90°	77-420-30-04
marScan grey scanner handpiece (100 mm) consisting of:	
marScan grey optics	77-450-00-04
marScan grey spatium tube	77-450-10-04
Accessory for laparoscopy	
marCoupler red	77-470-00-04
Laser protective goggle	
CO_2 laser protective goggle	79-100-57-04
Micromanipulator MicroPoint® 3	
Focal length 200-550 mm; joystick; adjustment rings for focus and focal length	76-430-00-04
Micromanipulator MicroPoint® 3S	
Focal length 200-550 mm; if scanner laser used; joystick with rotary-push-function for rotation and curvature of the scanned line; adjustment ring for focus; electronic focal length read-back on the ring and transmission to the laser	76-431-00-04

Designation	marLase Pro® 30/60/DUO	
Laser, type	CO_2 laser	
Laser, wavelength	10,600 nm	
Laser, power	30 W 60 W	
Laser, operating modes	Continuous, pulsed, super-pulsed, scanned	
Laser, pulse duration	10 ms – 10 s	
Scanner, figure size	0,4 mm – 15 mm	
Control/monitoring	Touch screen	
Operation	Touch screen, foot switch	
Cooling	Integrated air cooling	
Mains connection	100-240 V; 50/60 Hz	
Power consumption	max. 1500 VA	
Laser class	4	
Protection class	1	
Degree of protection	IP 2X	
Pilot laser	3R	
USB connection	Connection for the USB stick (08-504-10-01) to store the OP log data	
Dimensions	Width: 280 mm; width of chassis: 460 mm	
	Height: 1,240 mm	
	Depth: 500 mm; depth of chassis: 425 mm	
Weight	60 kg	
Environmental conditions for transport and storage	Ambient temperature Relative humidity (no condensing moisture!) Air pressure	-15 °C up to +50 °C 10-90% 700 hPa to 1,060 hPa
	Air pressure	700 hPa to 1,060 hPa
Environmental conditions for operation	Ambient temperature Relative humidity (no condensing moisture!) Air pressure	-15 °C up to +30 °C 30-85% 795 hPa to 1,060 hPa
Periodic Safety Check (SC)	Recommended once annually	

Designation	MicroPoint® 3	MicroPoint® 3S
Laser beam delivery	Concave mirror, semitransparent deflection mirror	
Operation	Adjustment rings for focus and focal length Joystick	Adjustment rings for focus and focal length Joystick with rotary encoder/pressure encoder
Dimensions	145 x 65 x 200 mm	
Weight	620 g	650 g
Scanner cable, length	-	170 mm
Focal length	200 mm to 550 mm	
Spot size	for focal length 200 mm: 0.11 mm for focal length 550 mm: 0.27 mm	
Focusing depth	5x higher focusing depth[1]	
Environmental conditions for transport and storage	Ambient temperature: -15 °C up to +50 °C Relative humidity (no condensing moisture!): 10% – 90%	
Environmental conditions for operation	Ambient temperature: +15 °C up to +30 °C Relative humidity (no condensing moisture!): 30% – 85% Air pressure: 795 hPa to 1,060 hPa	

[1] in comparison to MicroPoint 2/2S

KLS Martin Group

KLS Martin Australia Pty Ltd.
Sydney · Australia
Tel. +61 2 9439 5316
australia@klsmartin.com

KLS Martin do Brasil Ltda.
São Paulo · Brazil
Tel. +55 11 3554 2299
brazil@klsmartin.com

KLS Martin Medical (Shanghai) International Trading Co., Ltd
Shanghai · China
Tel. +86 21 5820 6251
info@klsmartin.com

KLS Martin India Pvt Ltd.
Chennai · India
Tel. +91 44 66 442 300
india@klsmartin.com

KLS Martin Italia S.r.l.
Milan · Italy
Tel. +39 039 605 67 31
info@klsmartin.com

KLS Martin Japan K.K.
Tokyo · Japan
Tel. +81 3 3814 1431
japan@klsmartin.com

KLS Martin SE Asia Sdn. Bhd.
Penang · Malaysia
Tel. +604 261 7060
malaysia@klsmartin.com

KLS Martin de México, S.A. de C.V.
Mexico City · Mexico
Tel. +52 55 7572 0944
mexico@klsmartin.com

KLS Martin Nederland B.V.
Huizen · Netherlands
Tel. +31 35 523 45 38
infonl@klsmartin.com

KLS Martin SE & Co. KG
Moscow · Russia
Tel. +7 499 792 76 19
russia@klsmartin.com

KLS Martin Taiwan Ltd.
Taipei · Taiwan
Tel. +886 2 2325 3169
taiwan@klsmartin.com

KLS Martin SE & Co. KG
Dubai · United Arab Emirates
Tel. +971 4 454 16 55
middleeast@klsmartin.com

KLS Martin UK Ltd.
Reading · United Kingdom
Tel. +44 118 467 1500
info.uk@klsmartin.com

KLS Martin LP
Jacksonville · Florida, USA
Tel. +1 904 641 77 46
usa@klsmartin.com

KLS Martin SE Asia Sdn. Bhd.
Hanoi · Vietnam
Tel. +49 7461 706-0
vietnam@klsmartin.com

KLS Martin SE & Co. KG
A company of the KLS Martin Group
KLS Martin Platz 1 · 78532 Tuttlingen · Germany
PO Box 60 · 78501 Tuttlingen · Germany
Tel. +49 7461 706-0 · Fax +49 7461 706-193
info@klsmartin.com · www.klsmartin.com