

spirit of excellence





Power. Flexibility. Usability.

The **MegaPulse 70+** is the newest addition to the Richard Wolf laser product line. The system is suited for a wide variety of treatment options and provides users with power, versatility, and an excellent cost-performance ratio.

MegaPulse 70+ – Discover the benefits.

Power.

Developed to impress. **MegaPulse 70**⁺ offers superior frequency and energy, and an EXPERT Mode, which allows the user to select pulse lengths on an individual basis.

Power: max. 70 watts

Energy: max. 5 joules

Frequency: max. 60 hertz

Flexibility.

The **MegaPulse 70+** laser is ideal for stone and BPH treatment in urology as well as other interventions across a range of specialties:

Urology

ENT

Arthroscopy

Gynecology

Dermatology

Oral surgery

General Surgery

Plastic Surgery

etc.

Orthopedics

Vascular Surgery

Thoracic surgery

Gastroenterology

Usability.

Intuitive and convenient handling allows the user to easily navigate between three different clinically-tested modes.

LITHOTRIPSY Mode

SOFT TISSUE Mode

EXPERT Mode





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LITHOTRIPSY

SOFT TISSUE







Fast and effective stone treatment



Working with the **MegaPulse 70**+ laser in LITHOTRIPSY Mode is convenient and effective. This mode offers different presets depending on the location and the characteristics of a stone.

The user can select settings to favor fragmentation (setting: "Power Fragmentation"), dusting (setting: "Dusting", "Power Dusting") or popcorning (setting: "Popcorning").

Thanks to its high frequency and energy, the **MegaPulse 70+** laser can be used for fast and effective stone therapy therefore representing a high-speed system for lithotripsy.

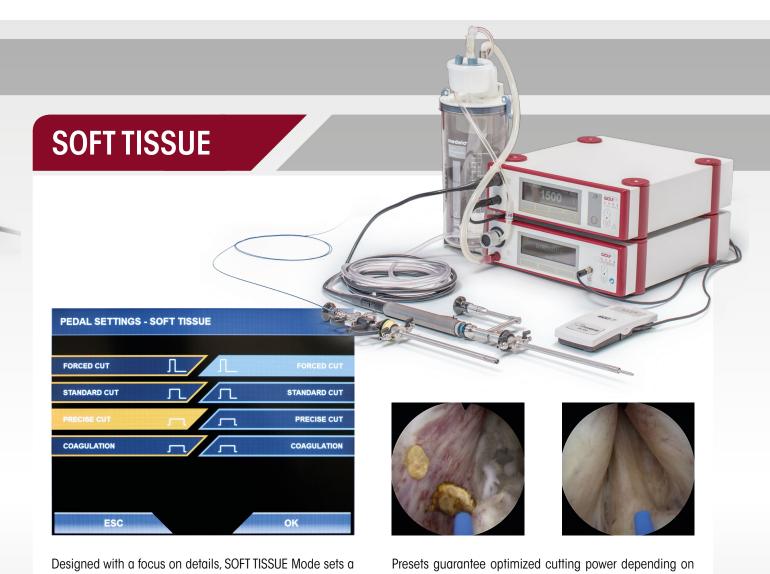
Used in conjunction with endoscopic instruments, the laser can effectively disintegrate stones within the bladder, ureter, urethra, or kidney.



new standard in precision and speed compared to

conventional methods.





SOFT TISSUE Mode's optimized frequency and energy settings yield perfect results with "only" 70 W – e.g. in the case of a Holmium laser enucleation of the prostate (HoLEP).

the characteristics of a tissue. The user can choose between "Forced Cut", "Standard Cut", and "Precise Cut" in order to

receive the optimal setting.

MegaPulse 70+ is also suitable for ablation or resection of bladder, urethral and ureteral tumors, transurethral incision of the prostate (TUIP), slitting of urethral structures, ablation of condylomas, and incision of the bladder neck.

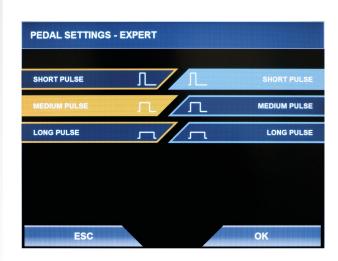








EXPERT



MegaPulse 70⁺ offers experienced users the option to select the pulse width in three stages – short, middle and long. This covers a broad spectrum of $50 \, \mu s - 1100 \, \mu s$.

Values for energy and frequency can be adjusted on an individual basis.



Depending on the type of treatment a short pulse can initiate effective stone fragmentation whereas a long pulse can achieve excellent hemostasis during treatment of BPH.

You will find additional information on our website:

www.richard-wolf.com/megapulse70plus



"This is a really good laser. Just hit the pedal and have fun!"

Dr. med. Michael Straub // Senior Urologist, Head of Endourology and Stone Center, University Hospital Klinikum rechts der Isar, Department of Urology Technical University Munich, Germany

Within EXPERT Mode the user has the flexibility to adjust settings according to individual requirements.



Power. Flexibility. Usability.

MegaPulse 70+, with all its innovative features, offers the surgeon and staff maximum versatility.





Automatic laser fiber recognition – even in the packaging

By means of RFID technology the **MegaPulse 70+** laser can identify laser fibers within the aseptic package – a direct connection to the laser is not necessary.

When using multiple-use laser fibers this feature allows the user to gather important information before unpacking the fiber:

Laser fiber diameter

Facilitates quick and safe identification of the fiber diameter otherwise difficult to distinguish with the naked eye.

History of use

The system recognizes how often a laser fiber has been used and how many more times the fiber can be reused until it must be replaced.



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The beauty is in the details

A large number of small details significantly enhance handling with the **MegaPulse 70+** laser, increase safety and also save time in the operating room.

Power Laser Fiber

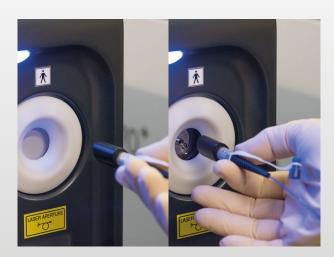
A special 200 μm Power Laser Fiber achieves an equivalent power output to that of a 272 μm fiber despite its smaller diameter, which makes it ideal for flexible ureterorenoscopy. Additional disposable and multiple-use laser fibers can also be ordered.

Double pedal foot switch

Orange and blue pedals can be used to easily switch for example between "Power Fragmentation" and "Popcorning". An additional standby function allows the user to activate/deactivate the laser as needed.

Automatic shutter at the fiber port

A shutter at the fiber port prevents dust particles from entering the system. The shutter's sensor-controlled, automatic opening facilitates handling with one hand.





12" touchscreen display

The large display can be rotated and tilted. It allows all functions to be operated intuitively and all important information to be displayed at a glance.

Blast shield

The filter between the fiber input and laser rod prevents contamination and can be easily exchanged.

Green pilot beam

The optional flashing function offers optimal orientation even in case of bleeding.

Internal water cooling

Compressors are used to provide cooling and permit use in rooms with a temperature range from 10°– 30°C.

Complete

in lithotripsy

LITHOTRIPSY

MAMBA vision

With the addition of the new flexible **MAMBA vision** sensor cystoscope Richard Wolf now offers a full portfolio of flexible sensor endoscopes.

COBRA vision

The unique dual channel **COBRA vision** flexible sensor ureterorenoscope (URS) is ideal for stone therapy.

BOA vision

BOA vision is a single channel, flexible sensor ureterorenoscope with a slim 8.7 Fr. diameter that can fit through a 9.5 Fr. access sheath and can therefore be used as an all-rounder particularly in case of difficult and small anatomies.

ENDOCAM Logic 4K

All three sensor endoscopes can be used with the new **ENDOCAM Logic 4K** but they are also compatible with the **ENDOCAM Logic HD**.



The Richard Wolf turnkey package comprises:

- Flexible sensor endoscopes
- ENDOCAM Logic 4K
- MegaPulse 70+ laser

Please contact us with any questions.

Mamba

COBRA

ROA

ENDOCAM Logic 4K

MEGA Pulse 70+

Complete

in BPH therapy



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SOFT TISSUE

SHARK Laser Resectoscopes

The **SHARK** resectoscope line takes quality, control and safety to a new dimension. **SHARK** combines a long track record of global experience and user feedback over many years. The result is an uncompromising, high-quality system for effective intervention.

PIRANHA Morcellator

The atraumatic distal tip of the **PIRANHA Morcellator** is open at the top and prevents the mucus membrane of the bladder from being sucked by mistake.

In combination with the Richard Wolf **Vmax Blade** this provides a highly-efficient system for high-speed morcellation.

ENDOCAM Logic 4K

Richard Wolf provides an impressive turnkey system with the **ENDOCAM Logic 4K** for use in endoscopy.
Coordinated image acquisition and processing is continuously optimized to 4K.

The result: clear, pin-sharp images with very realistic coloring.



The Richard Wolf turnkey package comprises:

- SHARK laser resectoscope
- ENDOCAM Logic 4K
- MegaPulse 70+ laser
- PIRANHA morcellator

Please contact us with any questions.



ENDOCAM Logic 4K







Ordering Information for CE market



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MegaPulse 70+

Laser Surgery Device Tower 70 W

included:

1x EU power cable (EAM0013415.00)

1x footswitch, 2 pedals (EBM001308.01)

2x laser protection goggles (OBM003778.00)

1x water filling bottle (IAM00088.00)

1x accessories box (KBM000103.01)

containing the following components:

1x door contact plug (EAM000045.00)

1x wrench set (MBQ000190.00)

2x Holmium Blast Shield (OAM001523.00)

1x fiber stripping tool for removing the insulation from the laser fiber, Ø 300–1,000 μ m (OBM001079.00)

1x fiber stripping tool for removing the insulation from the laser fiber, Ø 100–400 μ m (OBM001080.00)

1x ceramic cutter with silicone pad (AGM000080.00)

2x water hoses, for draining and de-aerating

(IAM000001.00) **PVMS00066**

Technical data

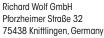
Power	70 watts	
Laser type	Holmium:YAG Laser (Ho:YAG)	
Wavelength	2100 nm (2.1 μm)	
Mode of operation	pulsed	
Voltage	200 – 230 V, 50/60 Hz, 5kVA, < 32 A	
Energy	200 mJ – 5000 mJ	
Frequency / rate	3 – 60 Hz	
Pulse duration	adjustable (50 µs – 1100 µs)	
Pilot beam	green: 532 nm, < 5 mW, adjustable to continuous or flashing	
Max. operating temperature	10°C – 30°C	
Storage temperature	min. + 5°C, max. 40°C	
Dimensions (W x H x D)	595 x 1200 x 1074 mm	
Weight (withour water)	200 kg	
Display	12" touchscreen	

Laser fibers

Core diameter	Disposable (PACK = 10 pc)	Reusable (PACK = 1 pcs)
opt. fiber performance 200 µm	OFC402011	OFC402013
optical fiber 200 µm	OFC002011	OFC002013
optical fiber ball tip 272 µm	OFC302711	-
optical fiber 272 µm	OFC702711	OFC702713
optical fiber 365 µm	OFC703611	OFC703613
optical fiber 550 µm	OFC005511	OFC005513
optical fiber 800 µm	OFC008011	OFC008013
optical fiber 1000 µm	OFC009911	OFC009913

Optional Accessoires

Fiber stripping tool for stripping the laser fiber 200 – 272 µm, autoclavable	AGM000053
Fiber stripping tool for stripping the laser fiber 365 – 400 µm, autoclavable	AGM000078
Fiber stripping tool for stripping the laser fiber 550 – 600 µm, autoclavable	AGM000052
Fiber stripping tool for stripping the laser fiber 800 µm, autoclavable	AGM000064
Ceramic cutter with silicon pad for shortening laser fibers, autoclavable	AGM000080
Perforated basket for laser fiber also: Fixing ring Ø 34.6 mm	38001 643301262



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