Power. Flexibility. Usability.

MEGA Pulse 70+
70 W Holmium:YAG Laser System
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
- Gynecology
- General Surgery
- Orthopedics
- Thoracic surgery
- ENT
- Dermatology
- Plastic Surgery
- Vascular Surgery
- Gastroenterology
- Arthroscopy
- Oral surgery
- etc.

Usability.

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

- LITHOTRIPSY Mode
- SOFT TISSUE Mode
- EXPERT Mode
LITHOTRIPSY

SOFT TISSUE

EXPERT
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.
Designed with a focus on details, SOFT TISSUE Mode sets a new standard in precision and speed compared to conventional methods. Presets guarantee optimized cutting power depending on the characteristics of a tissue. The user can choose between "Forced Cut", "Standard Cut", and "Precise Cut" in order to receive the optimal setting.

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).

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.
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 μs – 1100 μs.

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.

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

You will find additional information on our website:

megapulse70plus.richard-wolf.com

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

Dr. med. Michael Straub // Managing Senior Physician, Director of Endourology and Urinary Stone Therapy, Rechts der Isar Hospital, Munich
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.
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.
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
- Large range of disposable products

Please contact us with any questions.
Complete in BPH therapy

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.
MegaPulse 70+ Set

consisting of:
MegaPulse 70+ Laser (2286007), 2x laser safety goggles (OBM036003), 1x key set (2286525), 1x door contact plug (2286520), 2x blast shield (OAM001523), 1x filling bottle with tube set (IAM000088), 1x double pedal footswitch (2030232), 1x fiber stripping tool (2286527), 1x fiber stripping tool (2286523), 1x ceramic cutter with silicone pad (AGM000080), 1x accessories box for MegaPulse (KBM000103), 1x power cable 3 m (2286230) ........................22860070

Technical data

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<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Power</td>
<td>70 watts</td>
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<tr>
<td>Laser type</td>
<td>Holmium:YAG Laser (Ho:YAG)</td>
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<tr>
<td>Wavelength</td>
<td>2100 nm (2.1 μm)</td>
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<td>Mode of operation</td>
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<td>Voltage</td>
<td>200 – 230 V, 50/60 Hz, &lt; 32 A</td>
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<td>Energy</td>
<td>200 mJ – 5000 mJ</td>
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<td>Frequency / rate</td>
<td>3 – 60 Hz</td>
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<td>Pulse duration</td>
<td>adjustable (50 μs – 1100 μs)</td>
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<td>Pilot beam</td>
<td>green: 532 nm, &lt; 5 mW, adjustable to continuous or flashing</td>
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<td>Max. operating temperature</td>
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<td>Storage temperature</td>
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<tr>
<td>Dimensions (W x H x D)</td>
<td>595 x 1200 x 1074 mm</td>
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<td>Weight</td>
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<tr>
<td>Display</td>
<td>12” touchscreen</td>
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Accessories

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<tr>
<td>Laser safety goggles</td>
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<td>Fiber stripping tool for diameter 200 – 272 μm, autoclavable</td>
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<td>Fiber stripping tool for diameter 365 – 400 μm, autoclavable</td>
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<td>Fiber stripping tool for diameter 550 – 600 μm, autoclavable</td>
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<td>Fiber stripping tool for diameter 0.3 – 1.0 mm</td>
<td>2286523</td>
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<td>Ceramic cutter and silicone pad</td>
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<td>Accessories box for MegaPulse</td>
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