

POWER

IN YOUR HANDS

MultiPulse HoPLUS

HOLMIUM:YAG LASER
WHEN POWERFUL VERSATILITY
INTEGRATES UNMATCHED
PRECISION.



Main Application Fields

UROLOGY | GENERAL SURGERY | ENT



JENA SURGICAL
LASER AT YOUR SIDE

MultiPulse HoPLUS

MultiPulse HoPLUS

POWER IN YOUR HANDS

MultiPulse HoPLUS is a high power holmium laser device characterized by great flexibility and efficiency, which is a must in centers of excellence in **Endourology**.

Ideal for both **surgical treatment** of **benign prostatic hyperplasia (BPH)** and endoscopic treatments for lithotripsy, it is hardly recommended for long-duration procedures requiring high power thanks to its laser source reaching **140 W**.

MultiPulse HoPLUS ensures high surgical performance thanks to high levels of energy and pulse repetition rate, guaranteeing reduced operating time and cutting procedures effective and delicate at the same time, with an excellent hemostatic effect.

UROLOGY - applications

Prostate enucleation (BPH treatment) with HoLEP | Urinary lithotripsy | Urethrotomy

Benign Prostatic Hyperplasia

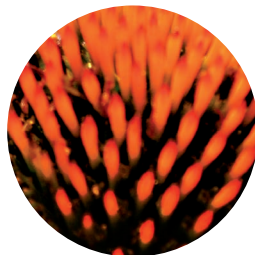
The **MultiPulse HoPLUS** enables the enucleation of the prostate as a minimally invasive alternative to the traditional techniques of **prostatectomy** such as transurethral resection (**TURP**) and open surgery.

HoLEP, together with the presence of the integrated mechanical morcellator (optional), makes it possible to reduce operating time and **treat prostates of any size**.

The **MultiPulse HoPLUS** does **not produce carbonization** or necrosis, leaving the surgical field free and clearly visible to the surgeon. The holmium laser emits a wavelength of 2,100 nm, which is well absorbed in water, resulting in photothermal and photomechanical effects which lead to effective vaporization and good hemostasis within the tissue.



PERFORMANCES



MultiPulse HoPLUS

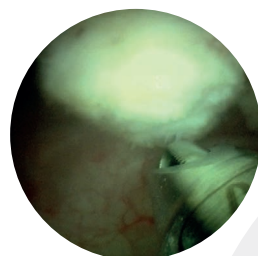
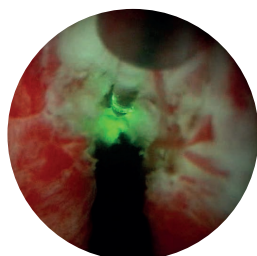
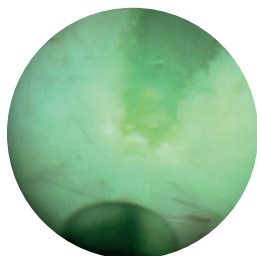
Advantages for the surgeon

- High power laser
- High peak power (with a wide range of power to get maximum operating efficiency)
- High pulse repetition rate
- Fast vaporization and cutting with excellent hemostasis
- Ability to always perform the histopathological exam of enucleated tissue samples. It is possible to request the integrated morcellator as an optional accessory.
- High versatility in endourology
- Easy to install and operate

Advantages for the patient

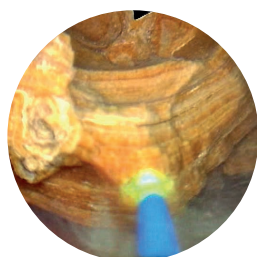
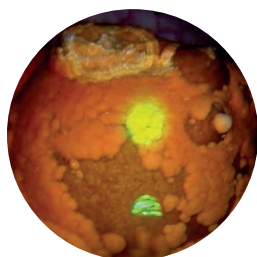
- Minimally invasive surgery
- Low probability of bleeding: recommended also for patients treated with anticoagulants
- Low rate of side effects
- Shorter catheter application time in the post-operative phase
- Shorter hospital stay and recovery time
- Low rate of recurrences
- Immediate relief of symptoms

Clinical Cases



Different steps of HoLEP for the treatment of benign prostatic hyperplasia (BPH), performed using the **MultiPulse HoPLUS** laser system.

[Courtesy of S. Piesche, MD - Clinic of Urology and Urological Oncology, Sana Klinikum Hof – Germany]



Bladder stone treatment (pulverization and fragmentation) with JenaSurgical **Holmium Laser**.

[Courtesy of S. Piesche, MD - Clinic of Urology and Urological Oncology, Sana Klinikum Hof – Germany]

MultiPulse HoPLUS is undoubtedly the most versatile laser system for Urology.

It offers a wide set of applications ranging from treatment of strictures (urethrotomy), bladder neck incision (BNI) as well as being universally recognized as the gold standard in **endoscopic lithotripsy** for stone **fragmentation** and **pulverization**, regardless of their composition and anatomical location (also for common bile duct stones and sialolithiasis).

Morcellation Module

Morcellation Module

The MultiPulse HoPLUS laser system contains an integrated morcellation module, which allows to perform morcellation of enucleated adenoma within the bladder very quickly. Thanks to the peristaltic pump, the suction is highly efficient and additionally ensures a maximum of safety and protection against unintended bladder wall injuries.



Morcellator Details



The optimized cutting teeth geometry guarantees enough tissue for a histopathological examination.



VERSATILITY



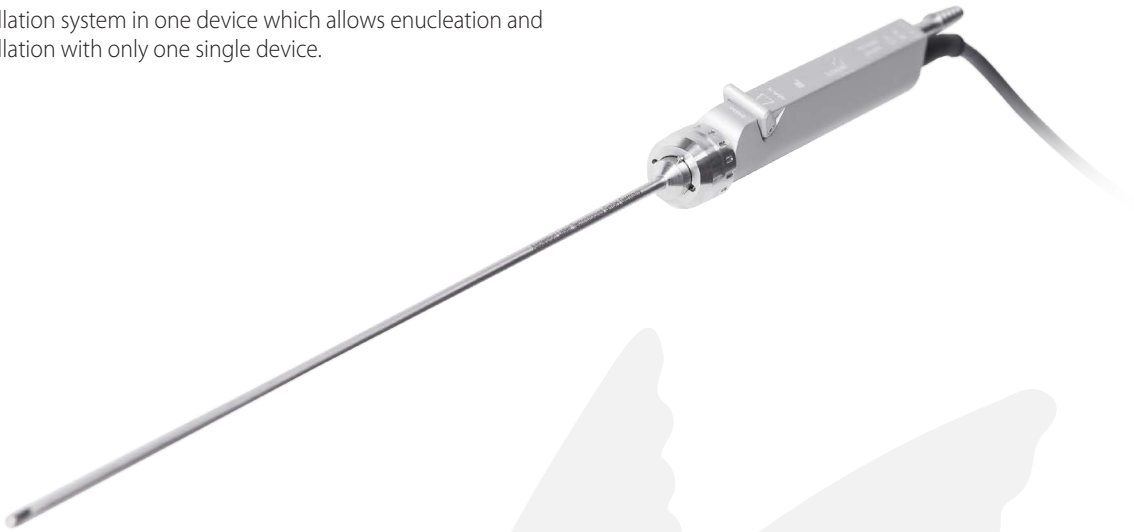
PROGRESS



MultiPulse HoPLUS

Morcellation Module

Unique of the MultiPulse HoPLUS is the combination of laser and morcellation system in one device which allows enucleation and morcellation with only one single device.



MultiPulse HoPLUS morcellation module

| Morcellator handpiece specifications | |
|--------------------------------------|--|
| Dimensions | 30 x 250 mm (diameter x free length) |
| Rotation speed | 500 – 4000 rpm |
| Oscillation frequency | 0 or 2 – 5 Hz |
| Sterilization method | Steam sterilization |
| Morcellator blade specifications | |
| Dimensions | 15 Fr x 350 mm (diameter x free length) |
| Aspiration pump | |
| Flow Rate | Adjustable |
| Morcellator Accessories | Tube set, morcellation handpiece with blades |

| MultiPulse HoPLUS | |
|---|---|
| Laser Source | Ho:YAG |
| Wavelength | 2,100 nm |
| Emission Mode | Pulsed Wave (pw) |
| Power | Up to 140 W |
| Pulse Energy | 0.25 - 6 J |
| Repetition Rate | 5 - 100 Hz |
| Pulse Duration | 150 - 1700 µs |
| Operating Temperature Range | 18° - 28° C |
| Rel. Humidity | Max 70% (not condensing) |
| Cooling | Internal water cooling |
| Beam Delivery | Wide Range of Flexible Optical Fiber |
| Aiming Beam | Laser Diode @532 nm <5 mW, adjustable |
| Control Panel | 10.1" LCD display 16:9 |
| Integrated Morcellation Module (Optional) | Integrated auxiliary morcellator Ergonomic handpiece Blades: exchangeable |
| Device Accessories | Fiber Handpieces and Cannulas Bare fibers (reusable and single use) available in following diameters: 200, 272, 365, 400, 550, 600, 800, 1000 µm |
| Electrical Requirements | 400 VAC, 50 Hz, <32 A, 3-phases |
| Dimensions and Weight | 116 (H) x 105 (D) x 46 (W) cm - 300 kg |

MultiPulse HoPLUS

Find more info about
MultiPulse HoPLUS



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LASER AT YOUR SIDE

Ideal for long-duration procedures requiring high power including BPH treatment and bladder stone fragmentation.

Applications

UROLOGY

Prostate enucleation (BPH treatment) with HoLEP |
Urinary lithotripsy | Urethrotomy

GENERAL SURGERY

Common bile duct stones

ENT

Sialolithiasis



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