

# POWER

IN YOUR HANDS

## MultiPulse HoPLUS

**HOLMIUM:YAG LASER**  
WHEN POWERFUL VERSATILITY  
INTEGRATES UNMATCHED  
PRECISION.



### Main Application Fields

UROLOGY | GENERAL SURGERY | ENT

Manufactured by  
Asclepion Laser Technologies GmbH

**JENA SURGICAL**  
LASER AT YOUR SIDE

### 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

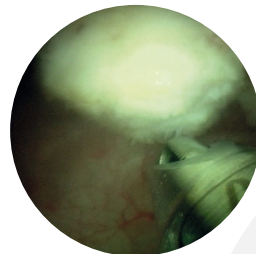
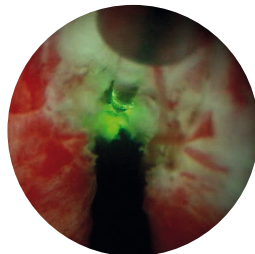
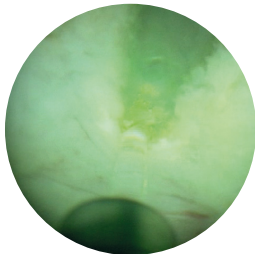
### Advantages for the surgeon

- 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

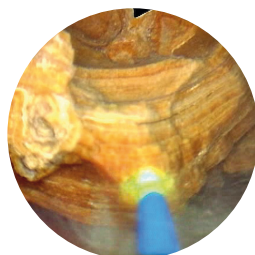
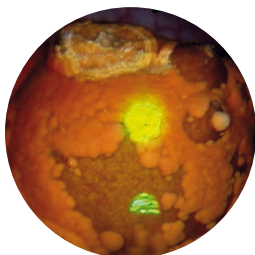
- Minimally invasive surgery
- Low probability of bleeding: recommended also for patients treated with anticoagulants
- Low rate of side effects
- Shorter catheter application time in the post-operative phase
- Shorter hospital stay and recovery time
- Low rate of recurrences
- Immediate relief of symptoms

## 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



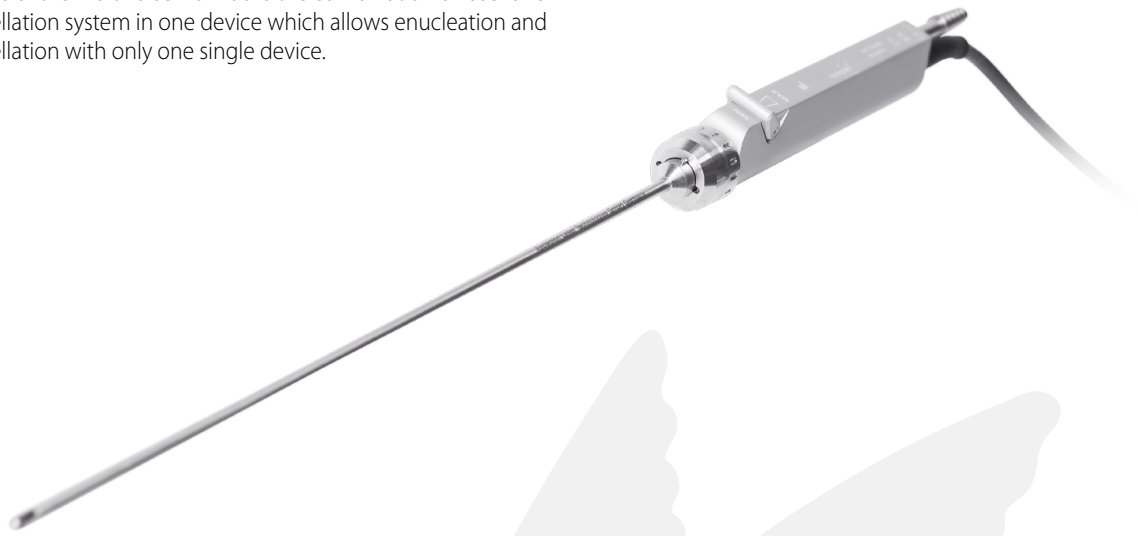
The optimized cutting teeth geometry guarantees enough tissue for a histopathological examination.



# 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)
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Rotation speed	500 – 4000 rpm
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Oscillation frequency	0 or 2 – 5 Hz
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Sterilization method	Steam sterilization
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#### Morcellator blade specifications

Dimensions	15 Fr x 350 mm (diameter x free length)
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#### Aspiration pump

Flow Rate	Adjustable
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Morcellator Accessories	Tube set, morcellation handpiece with blades
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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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JenaSurgical is the brand of the surgical business unit of Asclepion Laser Technologies.

**JENA SURGICAL**  
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



**DANGER**  
VISIBLE AND INVISIBLE LASER RADIATION  
AVOID EYE OR SKIN EXPOSURE TO  
DIRECT OR SCATTERED RADIATION  
CLASS 4 LASER PRODUCT

Treatment laser:	Wavelength	2100 nm
	Power	150W
	Pulse duration	150-2000 µs
	Laser class	4
Plot laser:	Wavelength	532 nm
	Power	< 4 mW
	Laser class	2
Classified:	acc. to EN 60825-1: 2014	

**CE** 0123

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