HOLMIUM LASER
HL-3000

Main Application Fields
UROLOGY | GENERAL SURGERY | ENT

Analytical Technologies Limited
An ISO 9001 Certified Company
www.analyticalgroup.net
HOLMIUM LASER

HOLMIUM LASER 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.

HOLMIUM LASER 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

The HOLMIUM LASER 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 HOLMIUM LASER 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.
**HOLMIUM LASER**

**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 HOLMIUM laser system.

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

**HOLMIUM LASER 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).
HOLMIUM LASER

MORCELLATION MODULE

The HOLMIUM LASER 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.
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| **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 |
HPLC Servicing, Validation, Trainings and Preventive Maintenance:

HPLC Servicing: We have a team of service engineers who can attend to any make of HPLC promptly at the most affordable cost.

Trainings: We also take up preventive maintenance to reduce downtime of HPLC's.

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- FTIR
- Gas Chromatograph 3000
- Gas Chromatograph 2979 Plus
- Flash Chromatograph
- Atomic Absorption Spectrophotometer
- Liquid Particle Counter

- Optical Emission Spectrophotometer
- DSC/TGA
- NOVA 2020 plus Automated Bio Chemistry Analyzer
- HEMA 2020 Hematology Analyzer
- Micro Plate Reader/ Washer
- URINOVA 2800 Urine Analyzer
- Total Organic Carbon

- Fully Automated CLIA
- NOVA Basic Semi-Auto Chemistry Analyzer
- PCR/Gradient PCR / RTPCR
- Blood Gas Analyzer
- Random access Analyzer for immunology, proteins & clinical chemistry
- Semen Analyzer
- Water purification system
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