Cyber Ho 100
THE REVOLUTION IN HOLMIUM SURGERY

Cyber Ho Holmium laser (2.1 µm) meets the increasing demand of efficacy, flexibility with a unique multi-application laser platform able to perform both Lithotripsy and HoLEP. Cyber Ho 100 can reach up to 105 W power and brings outstanding innovation by offering the exclusive Vapor Tunnel™ and MasterPULSE™ technology for advanced retropulsion control. This device further offers impressive settings regarding energy and frequency (up to 80 Hz).

General Overview

- BPH Treatment
- Effective Lithotripsy
- High Frequency Emission (up to 80 Hz)
- Minimized Retropulsion
- Reduced Depth of Penetration (0.3 - 0.4 mm)
- Soft Tissue Surgery
- High Versatility
- Quick ROI
The double footswitch enables immediate switch from one emission mode to another, with complete customization of pedal-mode association. No bothersome interruptions are needed for settings readjustment.
HoLEP (Holmium Laser Enucleation of the Prostate) is a proven technique for the treatment of BPH (Benign Prostatic Hyperplasia), with high effectiveness, safety and durability. The large amount of literature demonstrates its advantages in terms of efficacy and safety with respect to traditional treatments available for BPH. Recent studies and trials have validated the excellent outcomes achieved by this technique, with its success being reproduced in a diverse array of patients. HoLEP can be applied regardless of prostate size and in retreatment setting, with a low complication incidence and retreatment rate on long term follow-up.

Cyber Ho 100 offers full choice regarding settings selection, with superior surgical experience granted by the double footswitch, the intuitive and large modulation of pulse width and the dedicated modes for the different treatment steps. The endless combinations of settings and multiple tools allow the maximum treatment versatility, so that the surgeon can easily reach the desired outcome.
FAST CUTTING
The limited depth of penetration, together with the fast tissue incision, results in precise cut without affecting surrounding tissues

RELIABILITY
Clinical outcomes of HoLEP have been widely investigated, with many clinical studies demonstrating its safety and effectiveness also in the long run

SIZE INDEPENDENT
HoLEP overcomes the limitations affecting other BPH techniques regarding prostate size

EFFECTIVE HEMOSTASIS
The Holmium radiation is highly absorbed by water, allowing quick coagulation of bleedings

HIGH POWER
Up to 105 W output, for fast and quick incision, cutting down treatment time

DOUBLE FOOTSWITCH
Quick switch from one emission mode to another (eg. from cutting to coagulation emission)
TIME SAVING
Less stone retropulsion prevents the time-consuming fiber repositioning, whereas enhanced energy transmission increases the ablation rate.

MAGNETIC EFFECT
The Vapor Tunnel effect allows stone ablation while holding the target in place, without inducing stone retropulsion.

EASIER TREATMENT
With a more stable target, lithotripsy treatment can proceed easily with fewer hassles.

TIME SAVING
Less stone retropulsion prevents the time-consuming fiber repositioning, whereas enhanced energy transmission increases the ablation rate.
Effective and fast ablation results from the enhanced transmission of pulse energy.

As the pulse ends, the bubble collapses. The stone is dragged backwards together with the collapsing bubble (acting as a virtual stone basket).

How the Virtual Basket works.
Fragmentation

THE HIGHEST PULSE ENERGY
5 J allows the best pulse energy in its class

TREAT ALSO THE HARDEST STONES
Greater pulse energy allows to break harder stones

COLLECTION BASKET NEEDED
Retrieve stone pieces upon fragmentation
**Dusting Effect**

- **LONG PULSE**
  - Up to 1100 µs, for smooth Long Pulse Dusting

- **HIGH FREQUENCY**
  - Up to 80 Hz, for the best High Frequency Dusting in its class

- **LIMITED RETROPULSION**
  - Easy ablation with no need to fetch the stone

- **NO NEED FOR BASKET**
  - The obtained fine dust obviates the retrieval phase

- **EXTREME FREQUENCY**
  - Up to 80 Hz, for the best High Frequency Dusting in its class

- **LONG PULSE WIDTH**
  - Up to 1100 µs, for smooth Long Pulse Dusting
Reducing retropulsion and modifying tissue cutting get easier: instead of trying multiple different settings, start with your preferred ones and then adjust the MasterPULSE™ to tune the effect of laser emission based on your visual feedback. Regulation of pulse width has never been so easy!

**General Benefits**

Reducing retropulsion and modifying tissue cutting get easier: instead of trying multiple different settings, start with your preferred ones and then adjust the MasterPULSE™ to tune the effect of laser emission based on your visual feedback. Regulation of pulse width has never been so easy!

**Greater Flexibility**
7 levels of pulse width offer a greater flexibility with respect to the traditional 3 levels offered by the other holmium devices.

**Cutting Down Treatment Time**
Obtain the desired effect quickly, without getting mad with the standard adjustment of energy and frequency parameters.

**Ease of Treatment**
Experience a more intuitive and different way to adjust laser settings, simply based on your visual feedback.
User-friendly Software

- **MasterPULSE™**
- **Output Power**
  - Up to 105 W
- **Energy**
  - Up to 5 J
- **Frequency**
  - Up to 80 Hz
- **Emission Mode**
- **Energy Emission Mode**
- **Fiber Info**
  - 200 - 1000 µm
- **Emission Counters**

**GUIDED SELECTION**
- BPH
- Lithotripsy
- Soft Tissues

**SAVE AND LOAD OF SETTINGS**

![Image of device interface with options and settings]
Cyber Ho device can be operated with a large range of fibers, depending on the application, flexibility and settings required.

**STANDARD FIBERS**
For general use in stone and soft tissue treatments

**BALL TIP FIBERS**
Strongly simplify the insertion in already bent scopes

**PERFORMANCE FIBERS**
Designed to deliver great power even with small fibers

**GASTRO FIBERS**
Specifically designed for the fragmentation of gallstones

**FIBER CORE**
Delivers full energy to the target

**JACKET**
Helps in recognizing fiber position and improves probe stiffness

**CLADDING**
Maintains radiation energy within the core
AVAILABLE DIAMETERS
200, 272, 365, 550, 800 and 1000 µm

REUSABILITY
All fibers are available both as disposable and reusable (except ball tip model)

CLEANING
Reusable fibers can be sterilized by Sterrad® and steam sterilization

STERILIZATION TRAY
A dedicated tray for sterilization of fibers and tools

FIBER RECOGNITION
Cyber Ho automatically adjusts emission settings based on the connected fiber diameter.
Applications

Cyber Ho 100 can be used to perform incision, excision, resection, ablation, vaporization, coagulation and hemostasis of soft tissue and in lithotripsy of stones in various medical specialties, including:

- ENT
- SIALOLITHIASIS
- DISCECTOMY
- GASTRO-ENTEROLOGY
- ARTHROSCOPY
- UROLOGY
  - LITHOTRIPSY
  - BPH
  - TUMOR (Bladder, UUT)
  - STRICTURES
  - BNI
<table>
<thead>
<tr>
<th>Technical Specifications</th>
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<tbody>
<tr>
<td>Wavelength</td>
<td>2,1 µm</td>
</tr>
<tr>
<td>Average power</td>
<td>Up to 105 W</td>
</tr>
<tr>
<td>Repetition rate</td>
<td>Up to 80 Hz</td>
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<tr>
<td>Energy per pulse</td>
<td>Up to 5 J</td>
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<tr>
<td>Pulse duration</td>
<td>50 ÷ 1100 µs</td>
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<tr>
<td>Beam delivery</td>
<td>Wide range of flexible silica fibers</td>
</tr>
<tr>
<td>Aiming beam</td>
<td>532 nm (adjustable &lt;5 mW) - Class 3R</td>
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<tr>
<td>Fiber recognition</td>
<td>RFID System</td>
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<tr>
<td>Activation</td>
<td>Double footswitch</td>
</tr>
<tr>
<td>Electrical requirements</td>
<td>230 Vac; 50/60 Hz; 6.2 kVA - 208 Vac; 50/60 Hz; 6.2 kVA</td>
</tr>
<tr>
<td>Cooling</td>
<td>Internal chiller</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>10°C ÷ 30°C</td>
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<tr>
<td>Laser class</td>
<td>4 (IEC/EN 60825-1:2014)</td>
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<tr>
<td>Dimensions and weight</td>
<td>52 cm (W) x 120 cm (D) x 123 cm (H) (monitor closed), 230 kg</td>
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Note: National local authorities may put restrictions to the parameters indicated in the above table, or may limit or remove certain intended uses. Specifications are subject to change without notice.

Quanta System products are manufactured according to the International standards and have been cleared by the most important International notified bodies.
The company, divided into three business units (medical, scientific and industrial) is specialized in manufacturing of laser and opto-electronic devices.