



# Cyber Ho 60

*Holmium Laser System*





# Cyber Ho 60

## THE REVOLUTION IN LITHOTRIPSY

**Cyber Ho** Holmium laser (2.1  $\mu\text{m}$ ) meets the increasing demand of efficacy, flexibility and cost-effectiveness with a unique multi-application laser platform able to perform both **Lithotripsy** and **HoLEP**. **Cyber Ho** brings outstanding innovation by offering the exclusive **Vapor Tunnel™** and **MasterPULSE™** technology for advanced retropulsion control, along with impressive energy and frequency (up to **60 Hz**) settings.

### General Overview

- ✓ Effective Lithotripsy
- ✓ High Frequency Emission (up to 60 Hz)
- ✓ Minimized Retropulsion
- ✓ BPH Treatment
- ✓ Reduced Depth of Penetration (0.3 - 0.4 mm)
- ✓ Soft Tissue Surgery
- ✓ High Versatility
- ✓ Quick ROI

Intuitive GUI



12" Touchscreen

RFID Recognition System

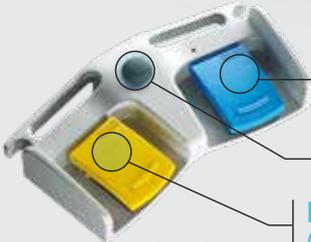
Automatic Aperture Sensor

Frontal Footswitch Connection

Fiber Connection

Transportation Handle

DOUBLE FOOTSWITCH



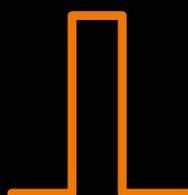
Mode #2 (eg. coagulation)

Ready / Standby Switch

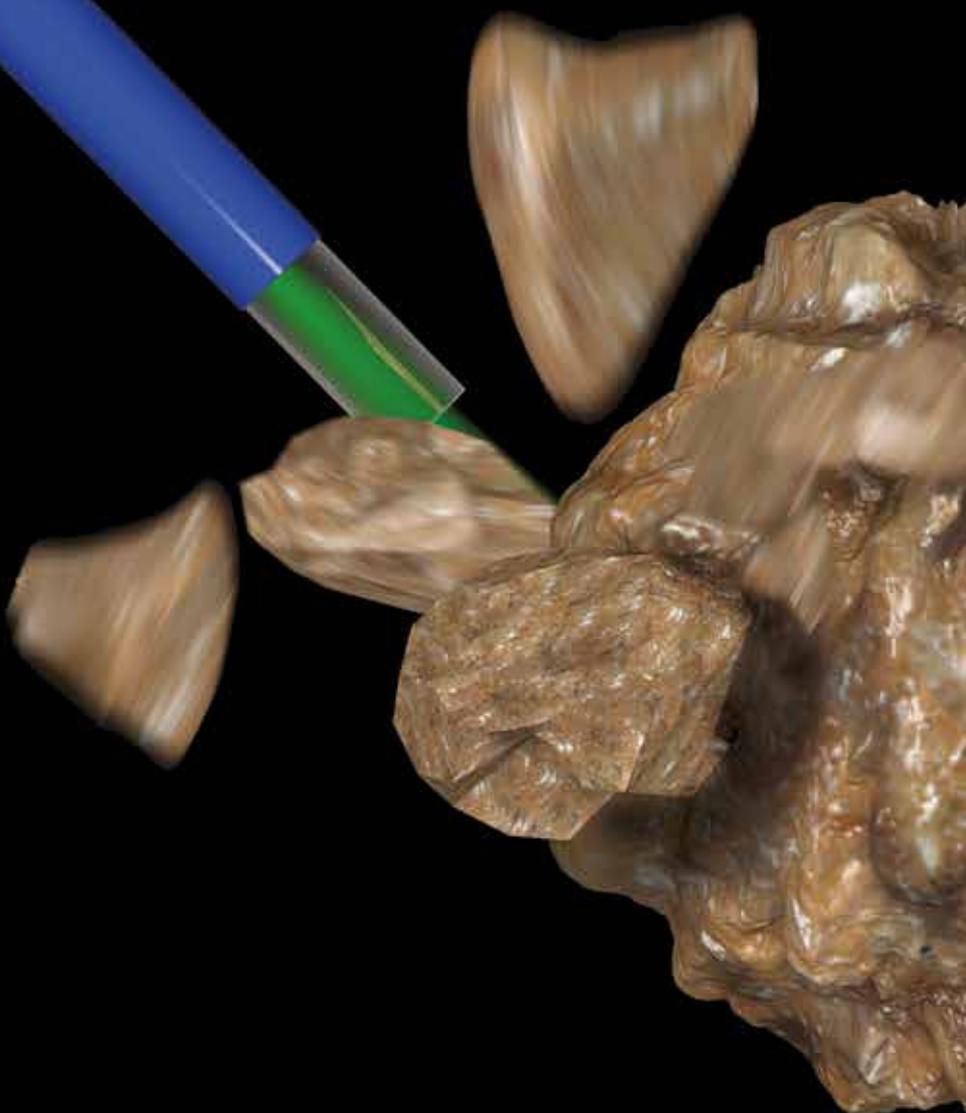
Mode #1 (eg. cutting)

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.

# Fragmentation



**SHORT PULSE  
(HIGH ENERGY)**



## **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



HIGH  
FREQUENCY

## 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

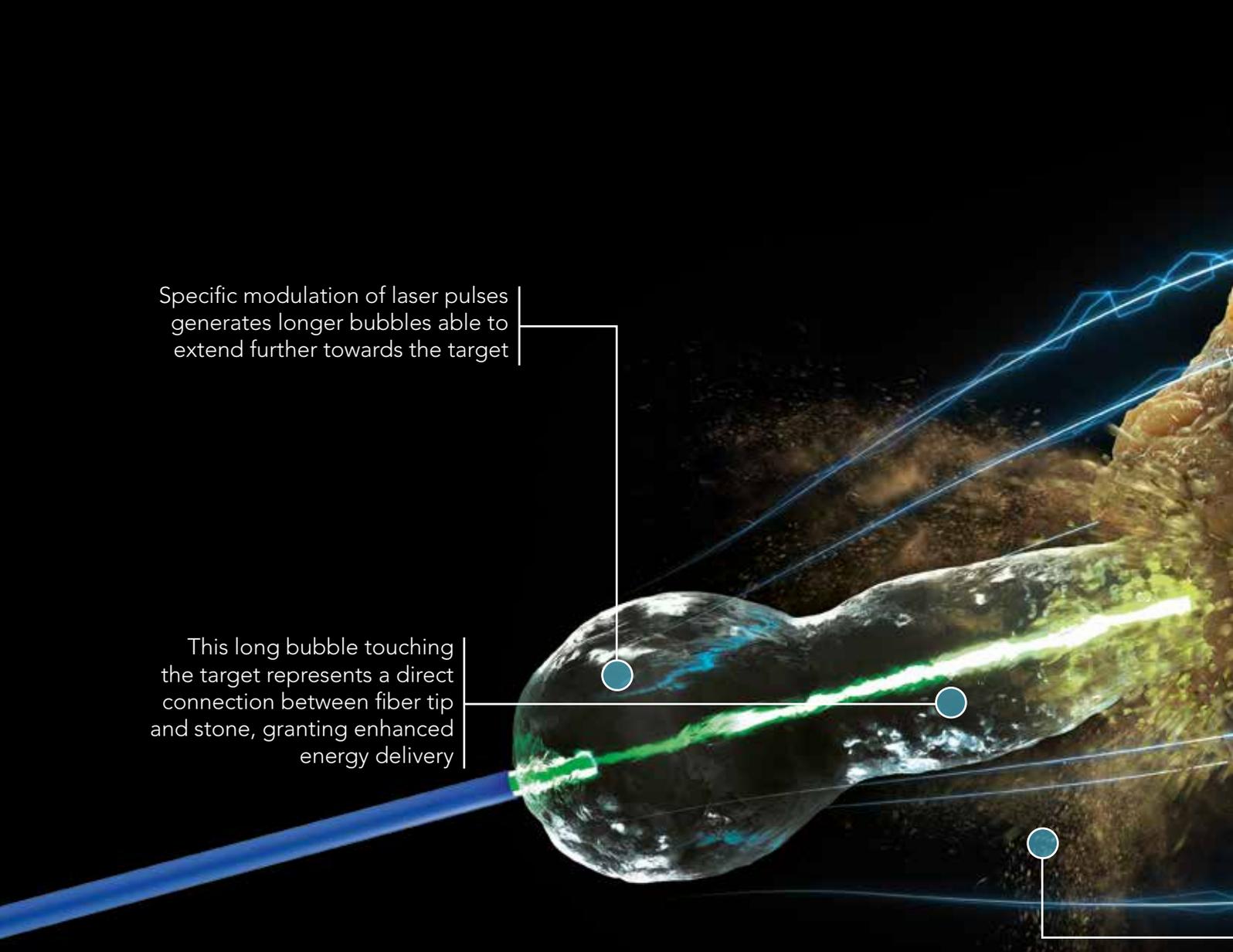
Up to 60 Hz, for the best *High Frequency Dusting* in its class



## LONG PULSE WIDTH

Up to 1100  $\mu$ s, for smooth *Long Pulse Dusting*





Specific modulation of laser pulses generates longer bubbles able to extend further towards the target

This long bubble touching the target represents a direct connection between fiber tip and stone, granting enhanced energy delivery



#### **MAGNETIC EFFECT**

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



#### **EASIER TREATMENT**

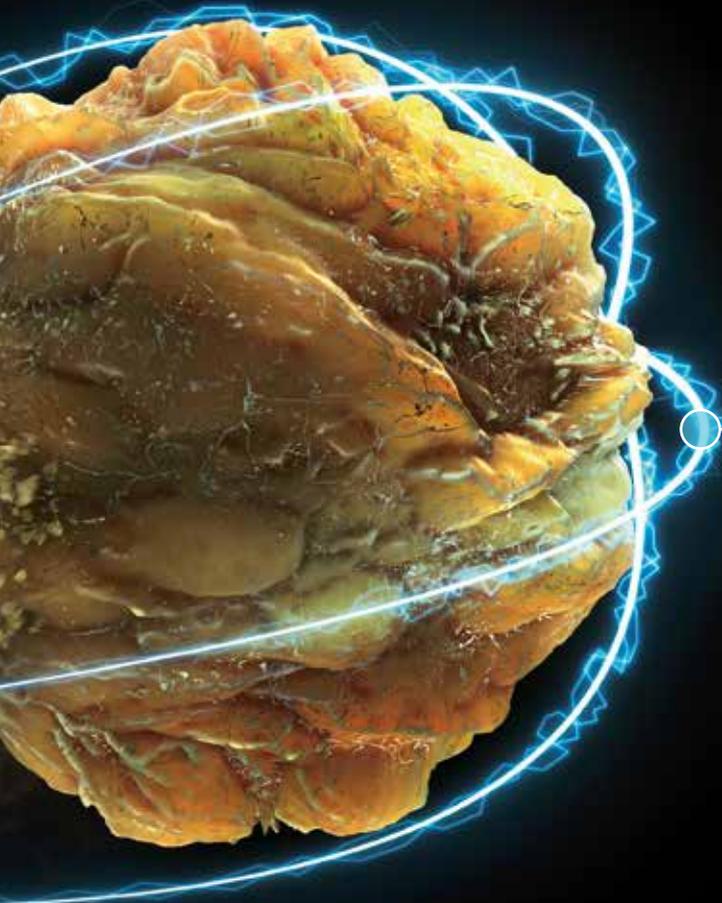
With a more stable target, lithotripsy treatment can proceed easily with fewer hassles



#### **TIME SAVING**

Less stone retropulsion prevents the time-consuming fiber repositioning, whereas enhanced energy transmission increases the ablation rate

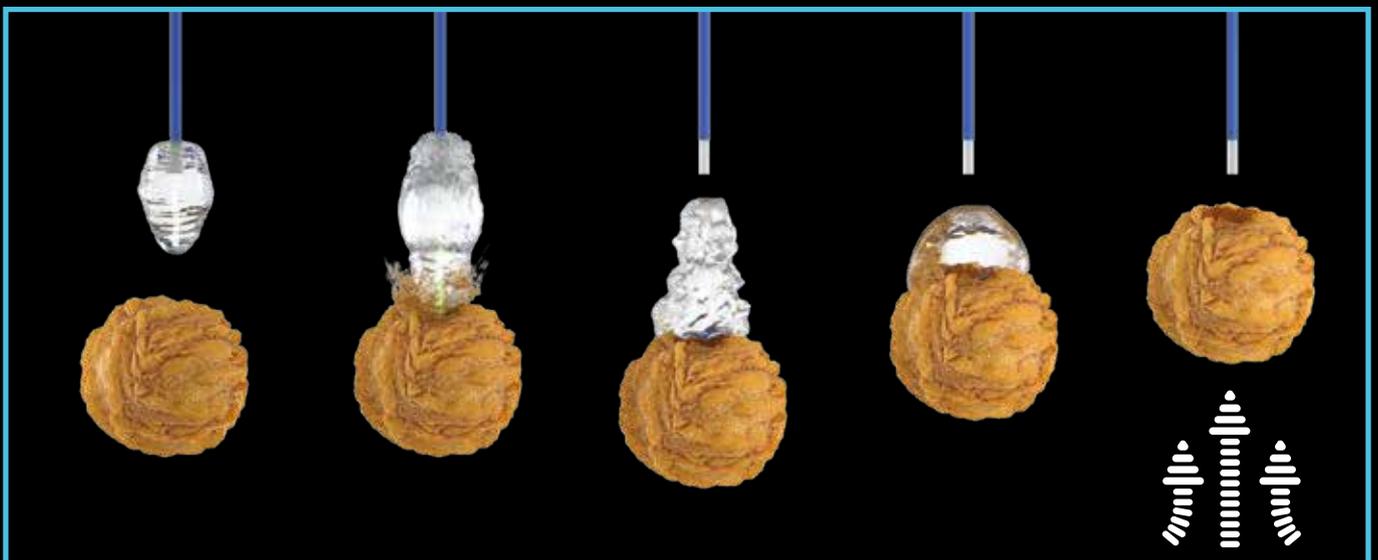
# Vapor Tunnel™



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

Effective and fast ablation results from the enhanced transmission of pulse energy

## How the *Virtual Basket* works

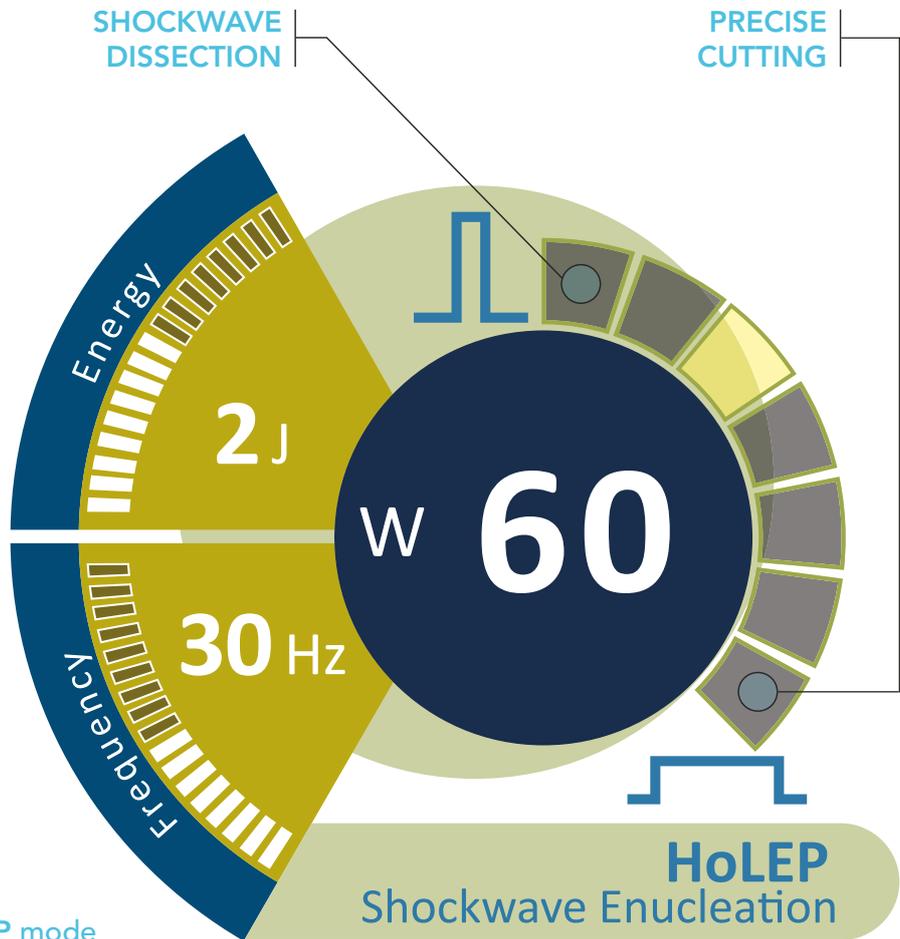


# MasterPULSE™



## CUTTING TUNING

Adjust cutting fashion based on your needs and the area of treatment



Example of HoLEP mode

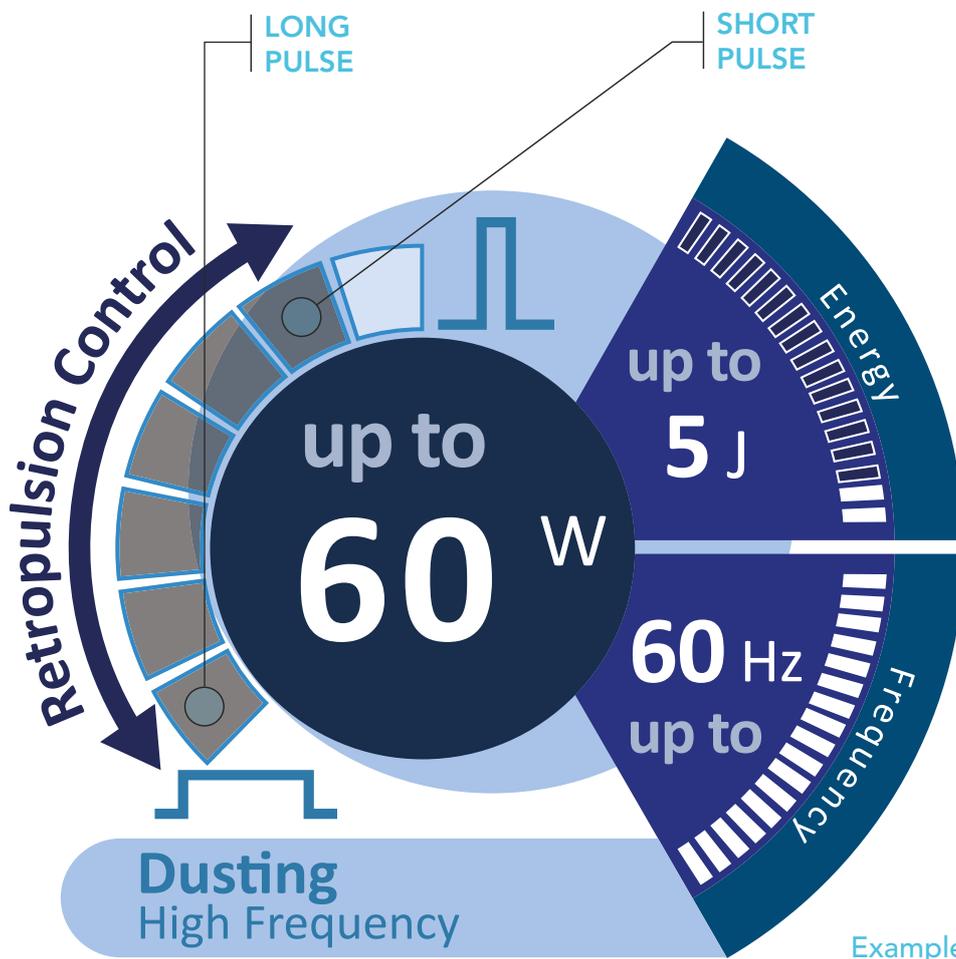
## General Benefits

Reducing retropulsion and modifying the 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!



## EASE OF TREATMENT

Experience a more intuitive and different way to adjust laser settings, simply based on your visual feedback



**REDUCED STONE INSTABILITY**

Lower the stone instability step by step, by progressively increasing pulse width

Example of Lithotripsy mode



**CUTTING DOWN TREATMENT TIME**

Obtain the desired effect quickly, without getting mad with the standard adjustment of energy and frequency parameters



**GREATER FLEXIBILITY**

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

# BPH

The large amount of literature demonstrates the efficacy and safety advantages of **HoLEP** (Holmium Laser Enucleation of the Prostate) 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. Clinical evidences proved a 50 - 60 W Holmium output to work perfectly for an effective and gentle enucleation. HoLEP with Cyber Ho provides excellent results in terms of long-term effectiveness, safety, hemostasis and fast recovery.



Starting 5 o'clock incision in HoLEP

- ✓ Precise cutting
- ✓ User preset saving
- ✓ Guided selection of settings
- ✓ Double footswitch



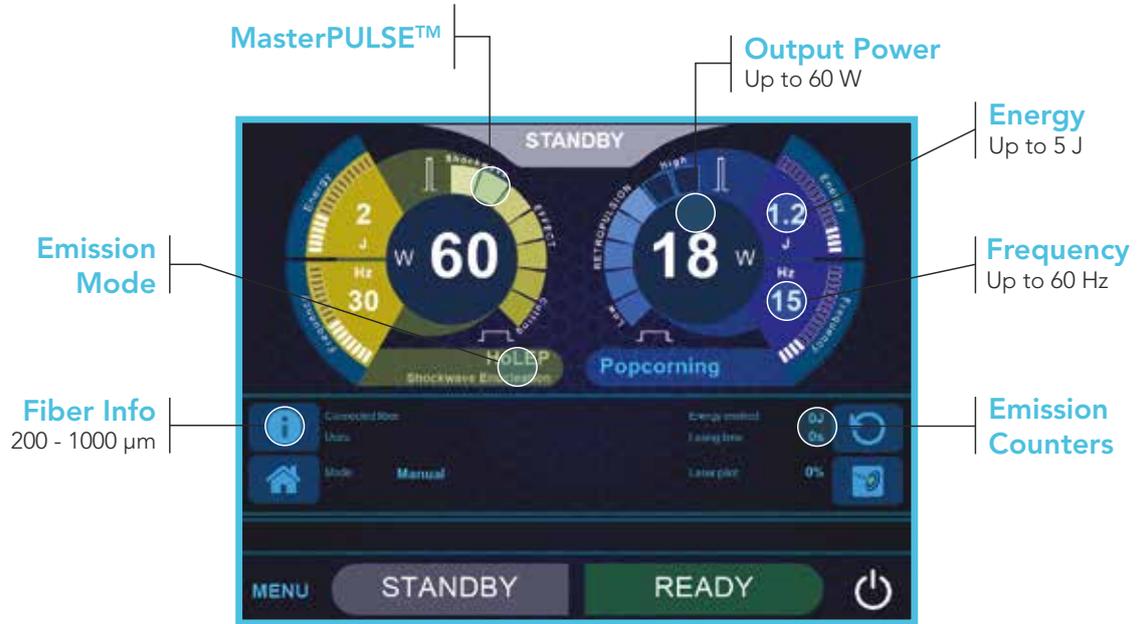
Quick switch from one emission mode to another (eg. from cutting to coagulation emission)



Delicate Areas Mode

Dedicated Coagulation Setting

# User-friendly Software



## GUIDED SELECTION

- BPH
- Lithotripsy
- Soft Tissues

## SAVE AND LOAD OF SETTINGS



# Fibers

**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 RECOGNITION

Cyber Ho automatically adjusts emission settings based on the connected fiber diameter



#### AVAILABLE DIAMETERS

200, 272, 365, 550, 800 and 1000  $\mu\text{m}$



#### REUSABILITY

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



#### CLEANING

Reusable fibers can be sterilized by Sterrad<sup>®</sup> and steam sterilization

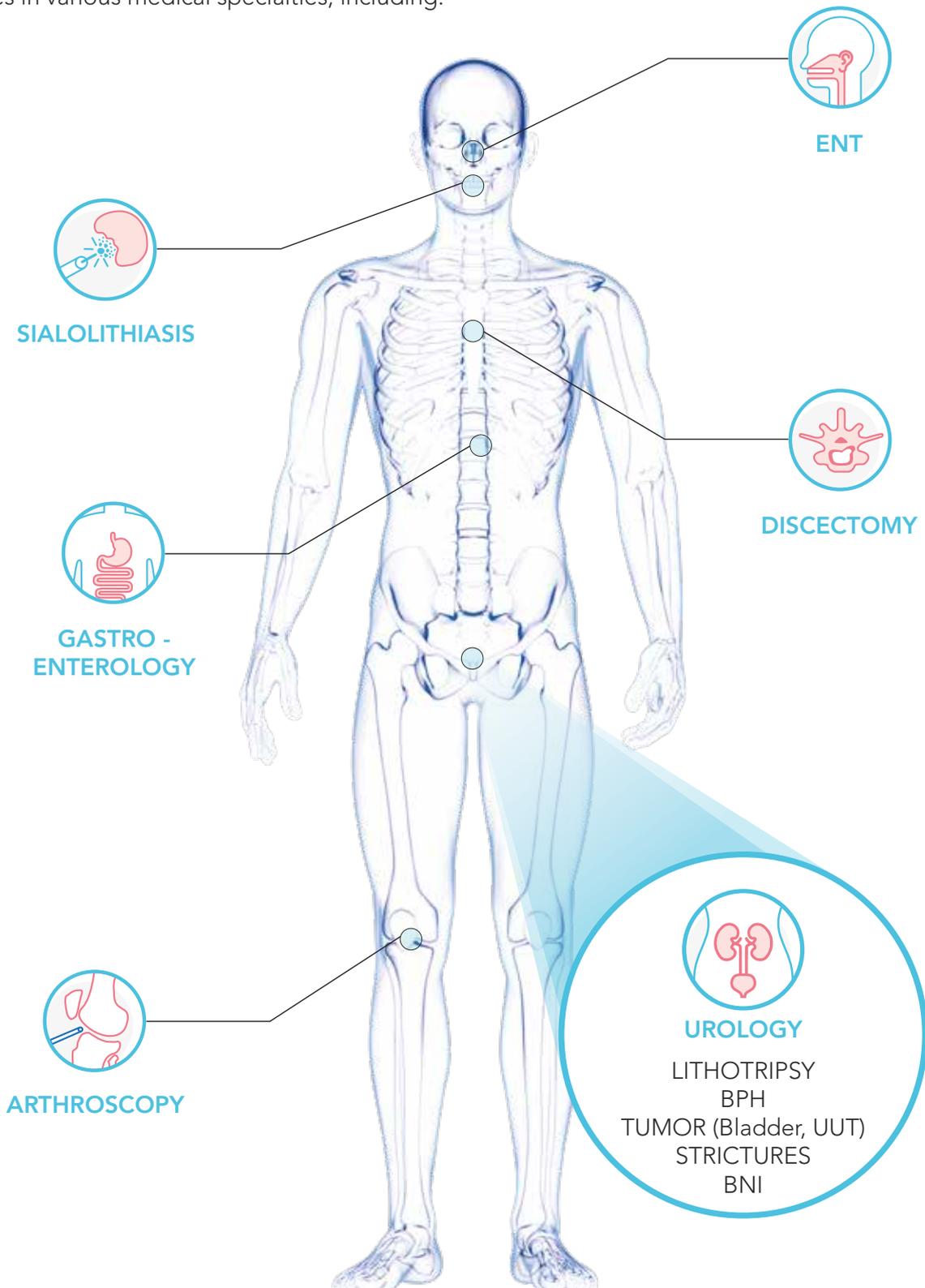


#### STERILIZATION TRAY

A dedicated tray for sterilization of fibers and tools

# Applications

**Cyber Ho 60** 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:



# Technical Specifications

<b>Wavelength</b>	2,1 $\mu\text{m}$
<b>Average power</b>	Up to 60 W
<b>Repetition rate</b>	Up to 60 Hz
<b>Energy per pulse</b>	Up to 5 J
<b>Pulse duration</b>	50 $\div$ 1100 $\mu\text{s}$
<b>Beam delivery</b>	Wide range of flexible silica fibers
<b>Aiming beam</b>	532 nm (adjustable <5 mW) - Class 3R
<b>Fiber recognition</b>	RFID System
<b>Activation</b>	Double footswitch
<b>Electrical requirements</b>	200-230 Vac; 50/60 Hz; <30A, single phase
<b>Cooling</b>	Internal chiller
<b>Operating temperature</b>	10°C $\div$ 30°C
<b>Laser class</b>	4 (IEC/EN 60825-1:2014)
<b>Dimensions and weight</b>	52 cm (W) x 120 cm (D) x 123 cm (H) (monitor closed) - 200 kg

**VISIBLE AND INVISIBLE LASER RADIATION**

Avoid eye skin exposure to direct or scattered radiation

Laser product: Class 4

Aiming beam: Class 3R



CAUTION - Laser radiation



*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 is UNI EN ISO 9001:2015 and EN ISO 13485:2016 certified. Quanta System S.p.A. was founded in 1985 and belongs to the El. En. Group (a public company listed in the Star segment of the Italian Stock Exchange) since January 2004.

The company, divided into three business units (medical, scientific and industrial) is specialized in manufacturing of laser and opto-electronic devices.

