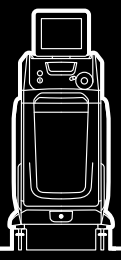
Quanta System
LASER IN OUR DNA

Cyber Ho 150



HOLMIUM LASER

Cyber Ho 150

THE REVOLUTION IN HOLMIUM SURGERY

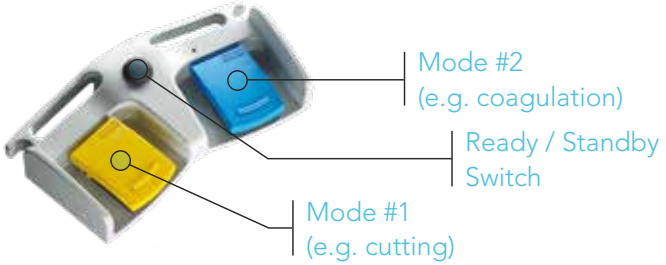
Cyber Ho Holmium laser (2.1 µm) meets the increasing demand of efficacy, flexibility with a unique multi-application laser platform able to perform both **Lithotripsy** and **HoLEP**.

Cyber Ho 150 can reach up to **152 W** power and brings outstanding innovation by offering the exclusive **Vapor Tunnel™**, **Virtual Basket™** and **MasterPULSE** technologies for advanced retropulsion control.
This device further offers impressive settings regarding energy and frequency (up to **100 Hz**).

General Overview

- BPH Treatment
- Effective Lithotripsy
- High Frequency Emission (up to 100 Hz)
- Minimized Retropulsion
- Reduced Depth of Penetration (0.3 - 0.4 mm)
- Soft Tissue Surgery
- High Versatility

Double Footswitch

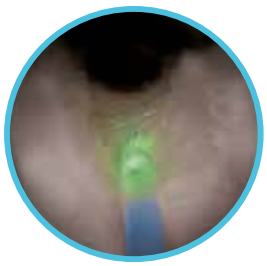


The double footswitch enables **immediate** switch from one emission mode to another, with **complete customization** of pedal-mode association. No bothersome interruptions are needed for settings readjustment.

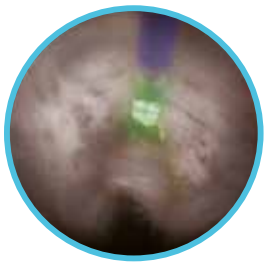
BPH

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.

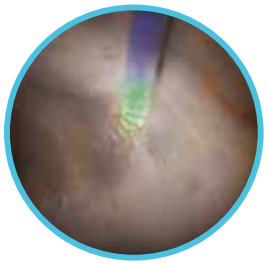
Cyber Ho 150 offers full choice regarding settings selection, with superior surgical experience granted by the double footswitch, the intuitive and large modulation of pulse width and the dedicated modes for the different treatment steps.
The endless combinations of settings and multiple tools allow the maximum treatment versatility, so that the surgeon can easily reach the desired outcome. As alternative, the surgeon may use the side fiber to perform a HoLAP procedure for small prostatic adenomas.



Starting 5 o'clock incision



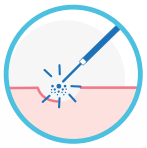
12 o'clock incision



Lateral lobe enucleation

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

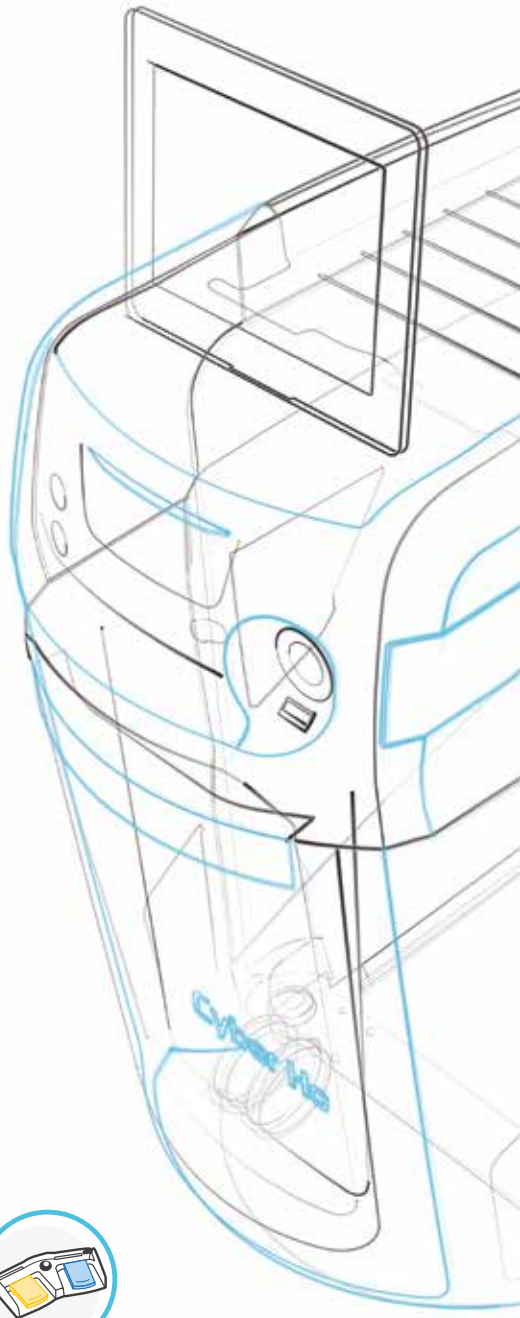
The Holmium radiation is highly absorbed by water, allowing quick coagulation of bleedings

HIGH POWER

Up to 152 W output, for fast and quick incision, cutting down treatment time

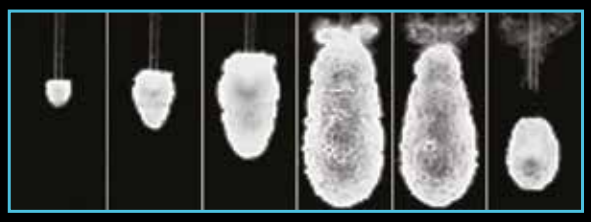
DOUBLE FOOTSWITCH

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



Vapor Tunnel™

Consisting of a Single **Specific Long Pulse**,
this emission mode allows limited retropulsion and fine stone ablation.
The Vapor Tunnel™ is designed in order to use the minimum peak power in accordance with selected output settings.

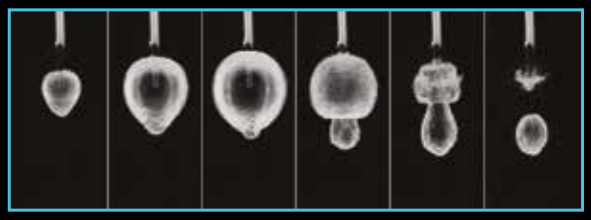


Bubble Dynamics of Vapor Tunnel™

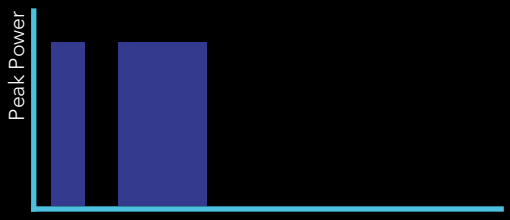
Virtual Basket™

Composed of a **Double Pulse Emission***,
combines a low retropulsion with a fragment suction effect.

*(time duration separating the two pulses is chosen so that the second pulse is emitted from the distal tip of the fiber when the bubble size, and the corresponding amount of displaced fluid, is at a maximum)



Bubble Dynamics of Virtual Basket™



Advantages of Virtual Basket™ & Vapor Tunnel™

NO EXTRA COSTS

These modes do not need dedicated and more expensive fibers, bringing the mentioned advantages without extra expenses

MAGNETIC EFFECT

These modes allow 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

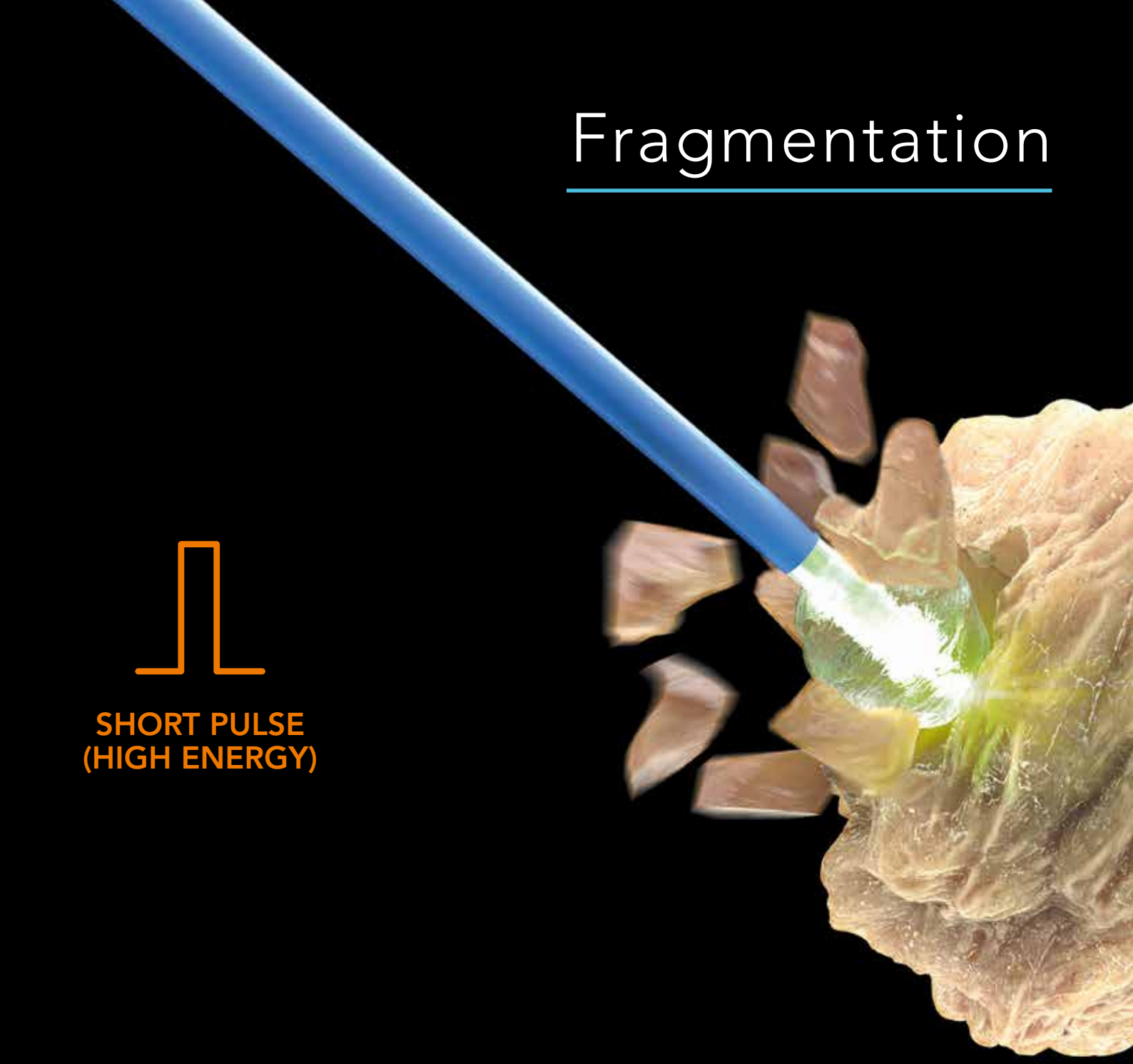
TIME SAVING

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

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

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

Fragmentation



SHORT PULSE (HIGH ENERGY)

HIGH PULSE ENERGY
Up to 5 J, for wide pulse energy range

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

COLLECTION BASKET NEEDED
Retrieve stone pieces upon fragmentation

Dusting Effect

LONG PULSE

LIMITED RETROPULSION

Easy ablation with no need to chase the stone

NO NEED FOR BASKET

The obtained fine dust obviates the retrieval phase

LONG PULSE WIDTH

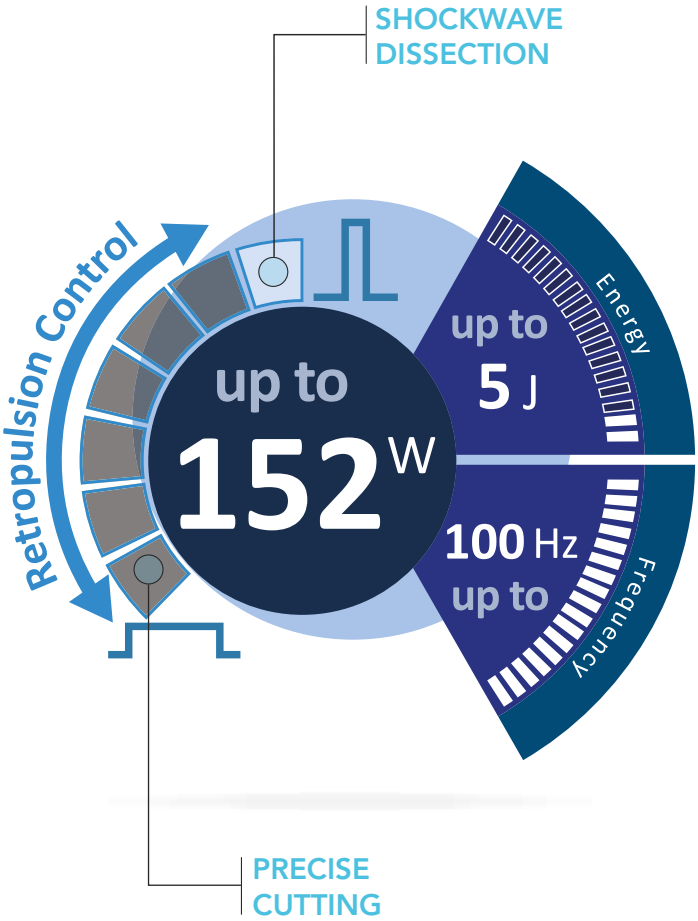
Up to 1100 µs, for smooth *Long Pulse Dusting*

EXTREME FREQUENCY

Up to 100 Hz, for enhanced speed in *Dusting* action

HIGH FREQUENCY

MasterPULSE



REDUCED STONE INSTABILITY

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

CUTTING TUNING

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

General Benefits

Reduce retropulsion and modify tissue cutting more easily: instead of trying multiple different settings, start with your preferred settings 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 compared 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

GUIDED SELECTION
- BPH
- Lithotripsy
- Soft Tissues

SAVE AND LOAD SETTINGS

Fibers

Cyber Ho device can be operated with a large range of fibers, depending on the application, flexibility and settings required.

JACKET
Helps in recognizing fiber position and improves probe stiffness

BUFFER
Protective Coating Layer

CLADDING
Maintains radiation energy within the core

FIBER CORE
Delivers energy to the target

STANDARD FIBERS
For general use in stone and soft tissue treatments

BALL TIP FIBERS
Strongly simplify the insertion in already bent scopes

SIDE FIBERS
The lateral emission is ideal for side tissue ablation, as in HoLAP

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, 600, 800 and 1000 µm

REUSABILITY

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

CLEANING

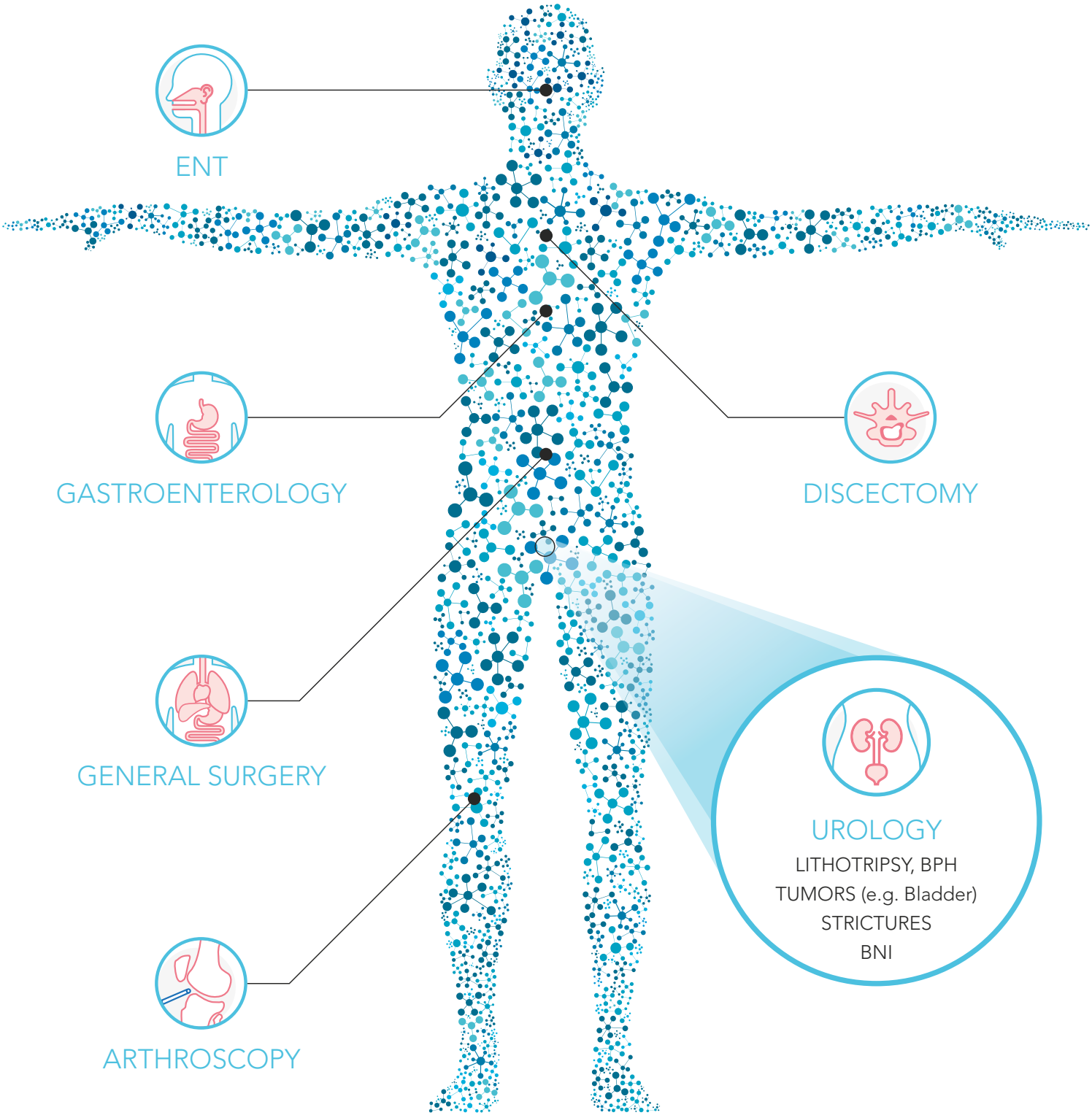
Reusable fibers can be sterilized by Sterrad® and steam sterilization

STERILIZATION TRAY

A dedicated tray for sterilization of fibers and tools

Applications

Cyber Ho 150 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, for example:



Technical Specifications

Wavelength	2,1 µm
Average power	Up to 152 W
Repetition rate	Up to 100 Hz
Energy per pulse	Up to 5 J
Pulse duration	50 ÷ 1100 µs
Beam delivery	Wide range of flexible silica fibers
Aiming beam	532 nm (adjustable <5 mW) - Class 3R
Fiber recognition	RFID System
Activation	Double footswitch
Electrical requirements	220-230 Vac; 50/60 Hz; 7.36 kVA - 208 Vac; 50/60 Hz; 7.36 kVA
Cooling	Internal chiller
Operating temperature	10°C ÷ 30°C
Laser class	4
Dimensions and weight	52 cm (W) x 120 cm (D) x 123 cm (H) (monitor closed), 260 kg

This brochure is not intended for the U.S. market.
Certain Intended Uses/Configurations/Models/Accessories are not cleared for U.S.

VISIBLE AND INVISIBLE LASER RADIATION
Avoid eye skin exposure to direct or scattered radiation
Laser product: Class 4
Aiming beam: Class 3R

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Note: National local authorities may put restrictions to the parameters indicated in the table in the previous page, 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 EI. 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.

Quanta System
LASER IN OUR DNA

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