

**Quanta System**  
LASER IN OUR DNA



# Litho DK30

*Holmium Laser System*



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

**SURGERY**





A detailed view of the Quanta System Litho DK30 surgical unit. The device is a light grey, desktop-sized machine with a control panel on the front. The panel includes a small LCD screen displaying the 'Quanta System' logo, a red emergency stop button, and a power switch. Below the screen, there are two ports for fiber optic cables, one with a black connector and the other with a red one. The 'Quanta System' logo is also printed in red on the lower part of the front panel, with the tagline 'LASER IN OUR DNA' underneath it. The top of the unit has a circular port, likely for ventilation or a fiber cable.

# Litho DK30

## 30W HOLMIUM:YAG FOR LITHOTRIPSY

**Litho DK30** surgical unit is a desktop device based on **Holmium (Ho:YAG)** laser with emission at **2100 nm** wavelength.

This wavelength is highly absorbed by water and biological tissue providing excellent cutting, ablation and hemostatic properties. The limited radiation penetration (0.3 - 0.4 mm) results in minimal damages to surrounding tissue.

The **Litho DK30** automatically adjusts the emission settings based on fiber diameter and selected mode.

## General Overview

- ✓ Effective Lithotripsy
- ✓ Reduced Depth of Penetration
- ✓ High Versatility
- ✓ Soft Tissue Surgery
- ✓ Compact Design
- ✓ Quick ROI
- ✓ Proximity Sensor



## COMPACT DESKTOP DESIGN

RFID Recognition System

Fiber Connection

Proximity Sensor for Automatic Aperture

Frontal Footswitch Connector



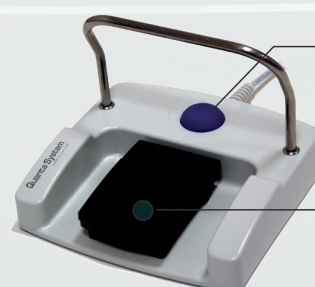
## Emission Mode

Lithotripsy and Soft Tissues



- 10.4" Touchscreen
- Fiber Diameter  
200-1000  $\mu\text{m}$
- Frequency  
Up to 25 Hz
- Pilot Laser  
Continuous or blinking
- Energy  
Up to 4 J
- Power  
Up to 30 W

## FootSwitch

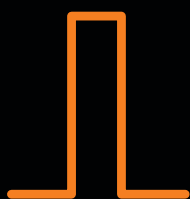


Ready / Standby Switch

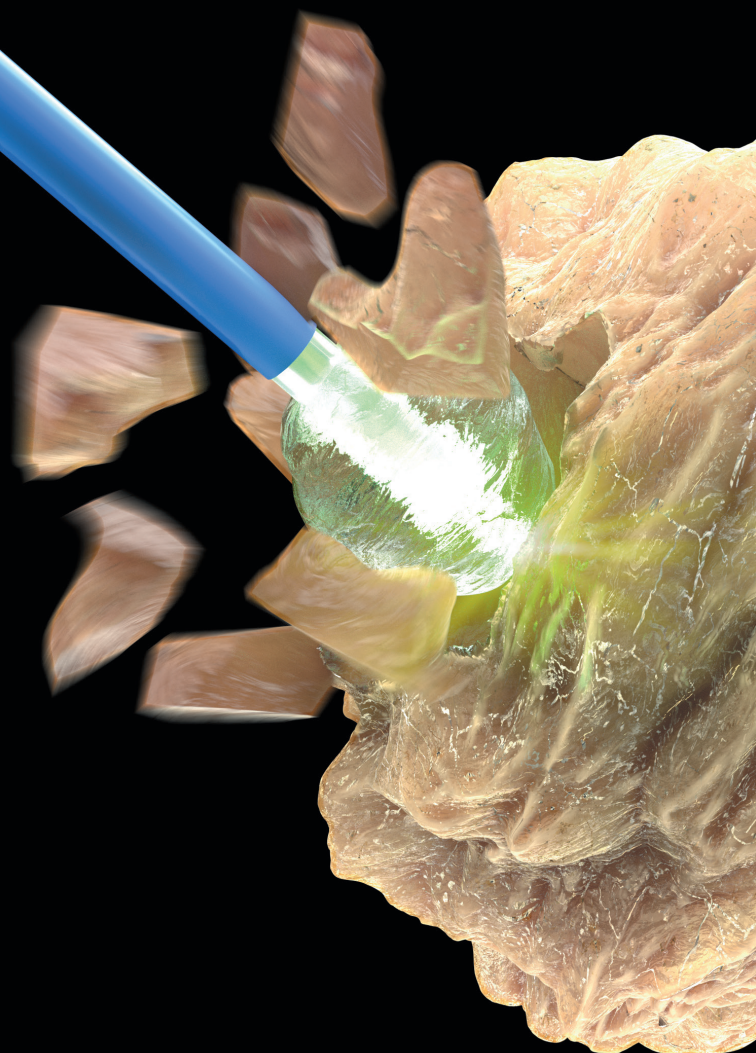
Emission



# Fragmentation



**SHORT  
PULSE**



## **HIGH PULSE ENERGY**

Up to 4 J, for superior pulse energy range



## **TREAT ALSO THE HARDEST STONES**

Greater pulse energy allows to break harder stones

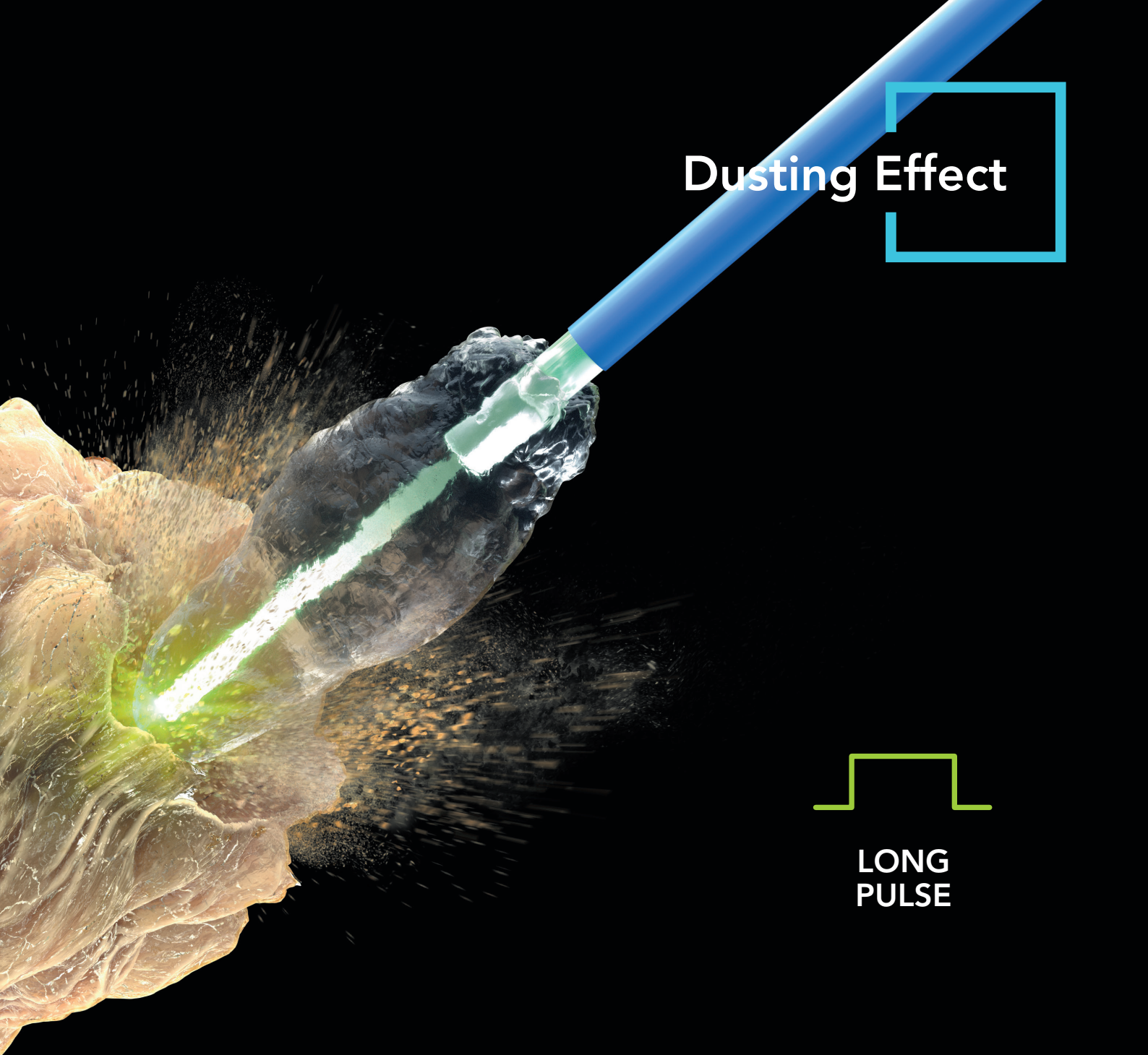


## **COLLECTION BASKET NEEDED**

Retrieve stone pieces upon fragmentation



# Dusting Effect



**LONG  
PULSE**

## **LONG PULSE WIDTH**

Up to 1500  $\mu$ s, for smooth ablation



## **LIMITED RETROPULSION**

Easy ablation with no need to chase stone



## **NO NEED FOR BASKET**

The obtained fine dust obviates the retrieval phase



# Settings Matter

**HIGH POWER**  
Up to 30 W,  
for fast tissue incision



**HIGH PULSE ENERGY**  
Up to 4 J,  
for the fragmentation of the  
hardest stones



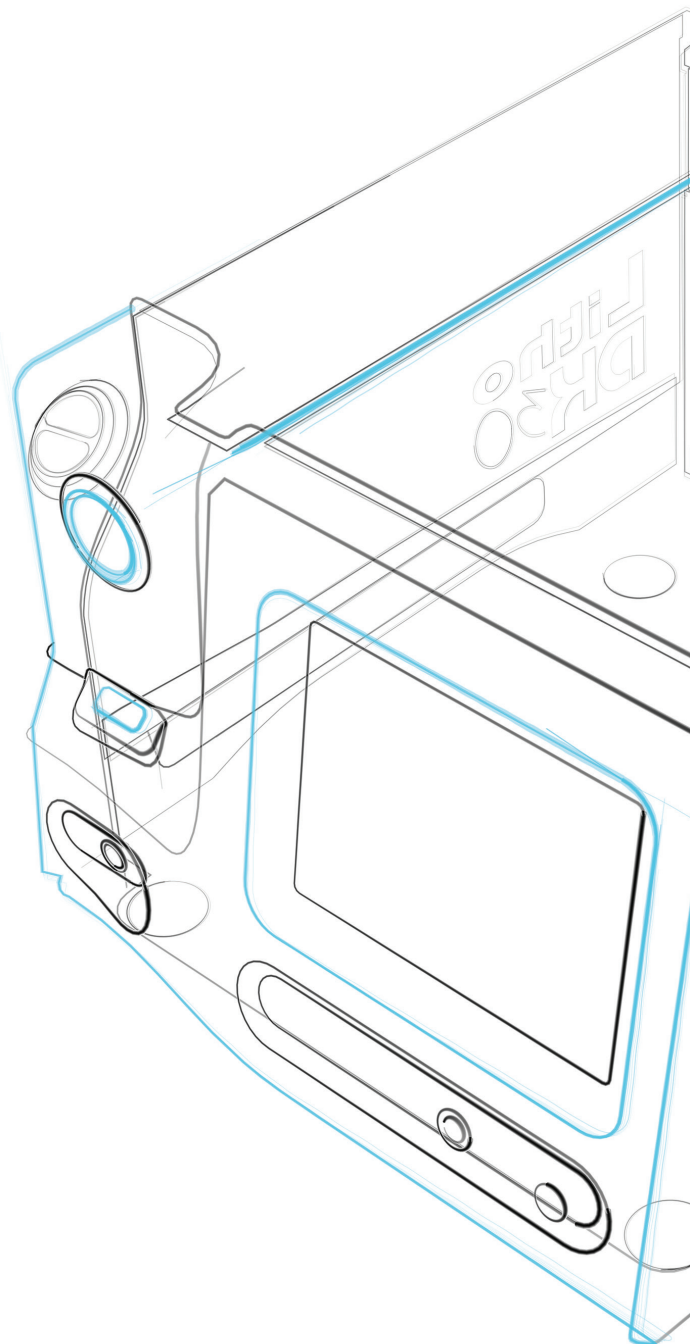
**HIGH FREQUENCY**  
Up to 25 Hz,  
for fast low energy ablation



**LARGE PULSE WIDTH RANGE**  
Up to 1500  $\mu$ s,  
for superior *Dusting* lithotripsy



**FLEXIBILITY**  
High power also with small fibers



## NUMBERS OF VERSALITY

Emission Modes

4

Fiber Diameters

6

Fiber Types

4



# Reliability

Litho family is a well-established laser technology in the worldwide market.  
These the numbers of its success:

1000+

INSTALLATIONS WORLDWIDE

25+

COUNTRIES WHERE  
INSTALLED

200+

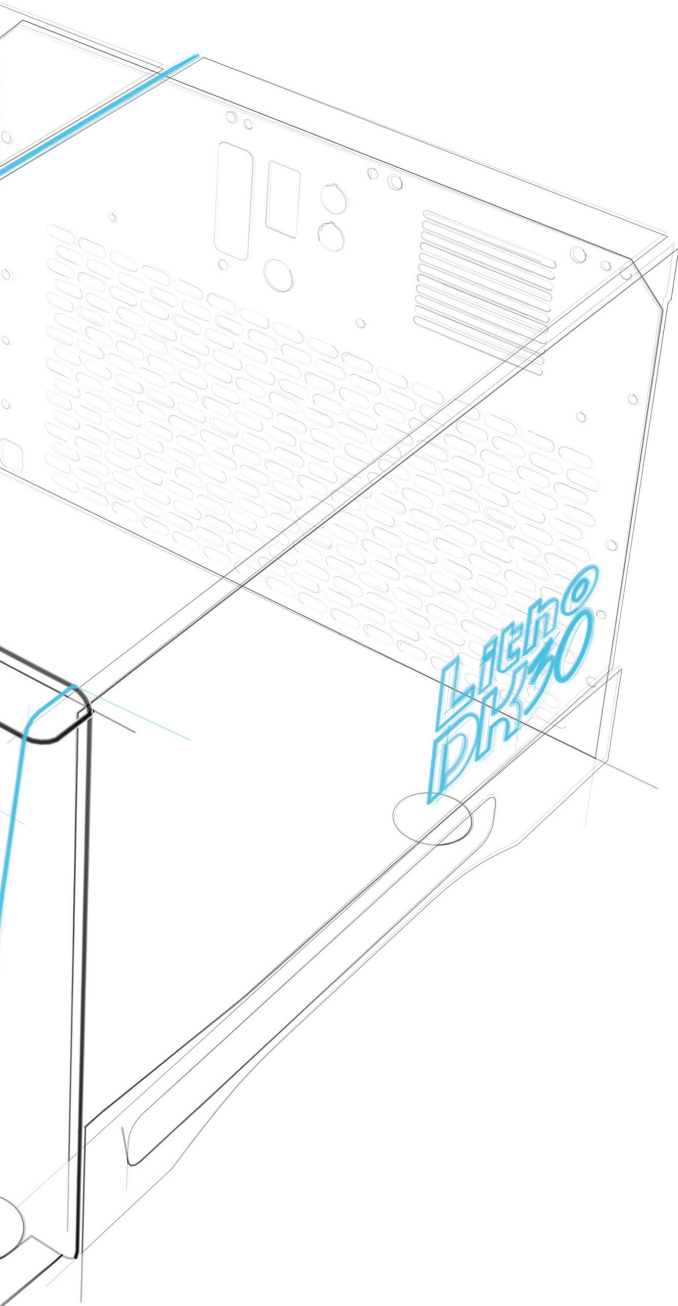
DOCTORS TRAINED AT  
OUR REFERENCE CENTERS

2008

INTRODUCTION OF THE  
FIRST LITHO DK30 MODEL

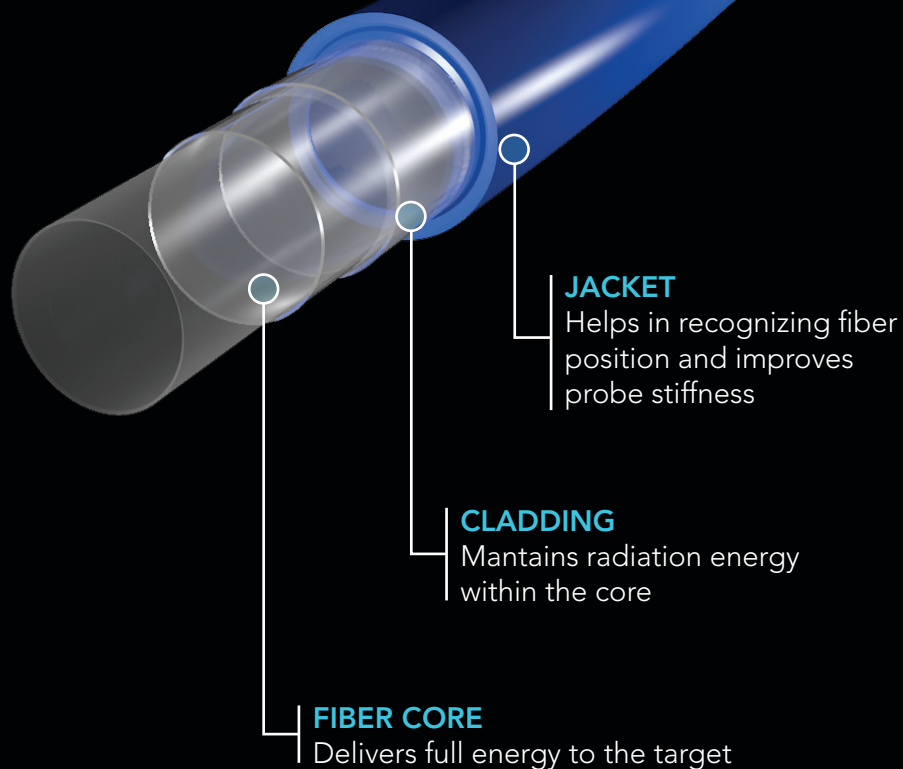
150+

AVAILABLE COMBINATIONS  
OF ENERGY, FREQUENCY AND  
PULSE WIDTH



# Fibers

**Litho DK30** 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

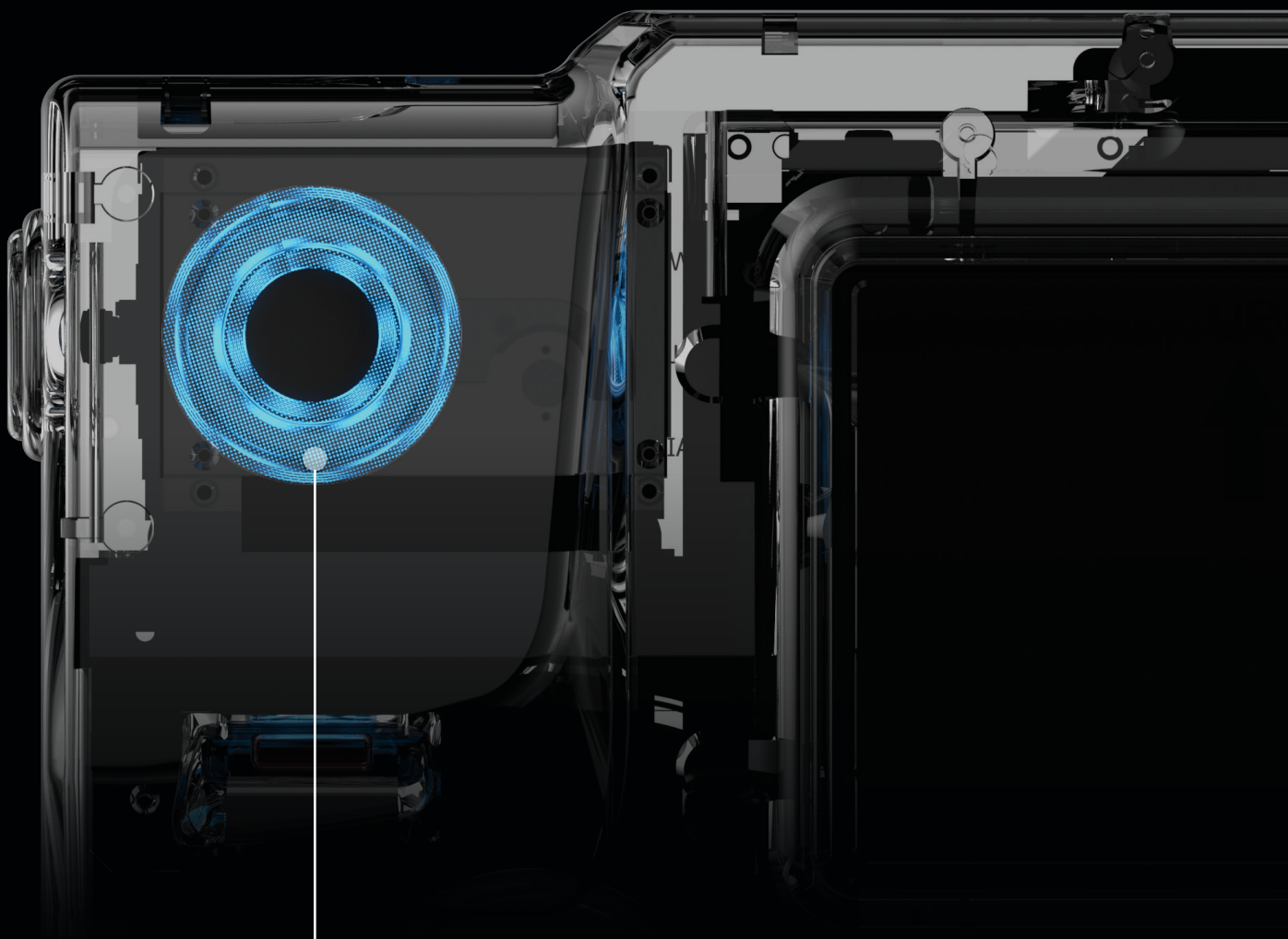
Designed to deliver great power even with small fibers



## GASTRO FIBERS

Specifically designed for the fragmentation of gallstones





#### FIBER RECOGNITION

Litho DK30 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® and steam sterilization

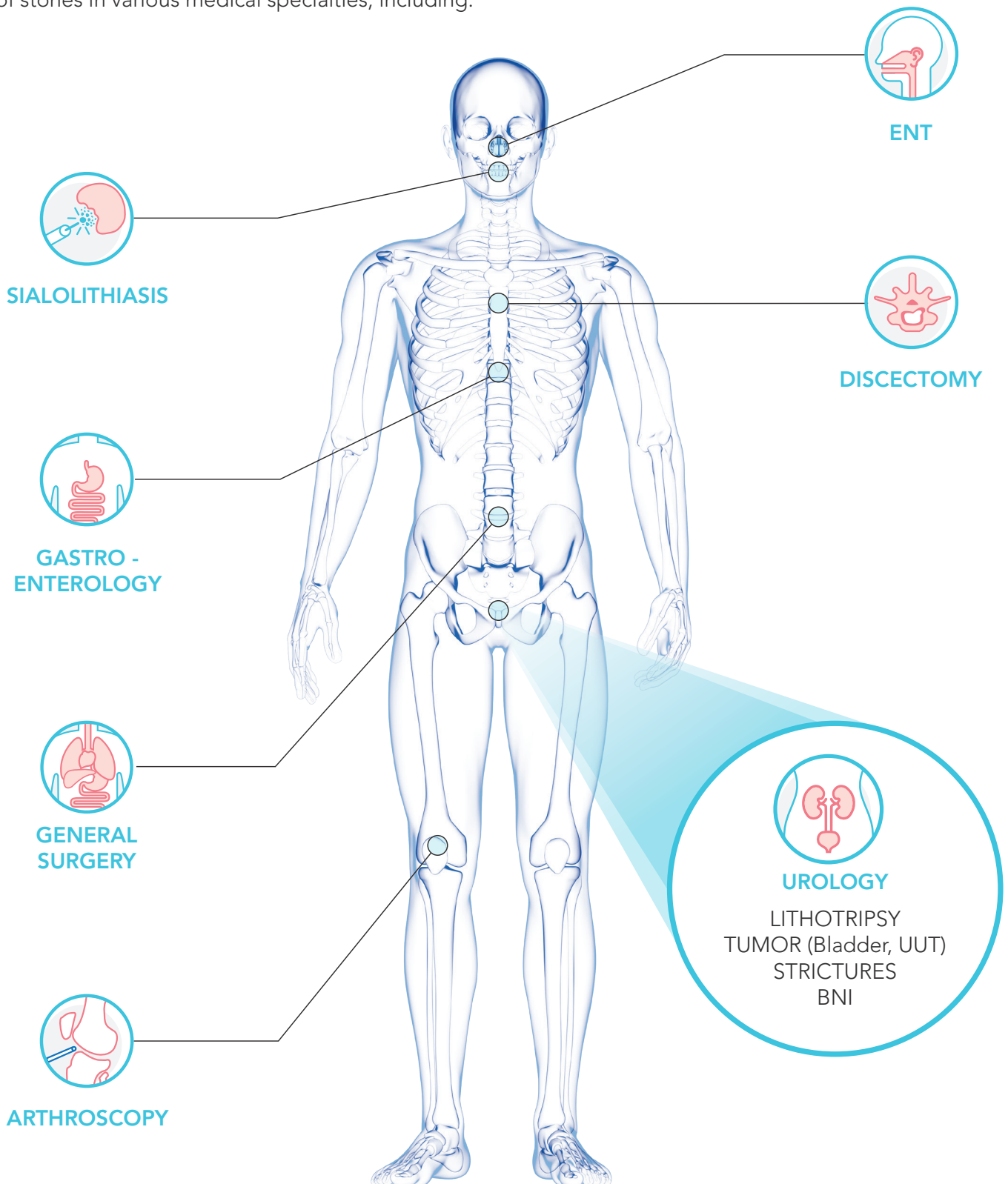


#### STERILIZATION TRAY

A dedicated fiber and tool sterilization tray is available

# Applications

**Litho DK30** 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

Wavelength	2,1 µm
Average power	Up to 30 W
Repetition rate	3 ÷ 25 Hz
Energy per pulse	0,2 ÷ 4 J
Pulse duration	95 ÷ 1500 µs
Beam delivery	Wide range of flexible silica fibers
Aiming beam	532 nm (adjustable <5 mW) - Class 3R
Fiber recognition	RFID System
Electrical requirements	100-120 Vac; 50/60 Hz; 16 A - 200-240 Vac; 50/60 Hz; 10 A
Cooling	Closed water air cooling circuit
Operating temperature	10° C - 30° C
Humidity	30% - 85% (no condensing)
Dimensions and weigth	50 cm (W) x 57 cm (D) x 37 cm (H) - 40 kg

**VISIBLE AND INVISIBLE LASER RADIATION**

Avoid eye skin exposure to direct or scattered radiation

Laser product: Class 4

Aiming beam: Class 3R



**CE**  
**0123**

*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.

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