



Litho family
Holmium Laser System





Litho

30W - 35W HOLMIUM:YAG FOR LITHOTRIPSY

Litho surgical unit is 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** 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





COMPACT DESIGN

RFID Recognition System

Fiber Connection

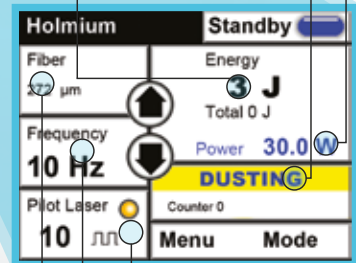
Frontal Footswitch Connection

Easy to Move

Energy
Up to 5 J

Power
Up to 35 W

Emission Mode
Lithotripsy
and Soft Tissues

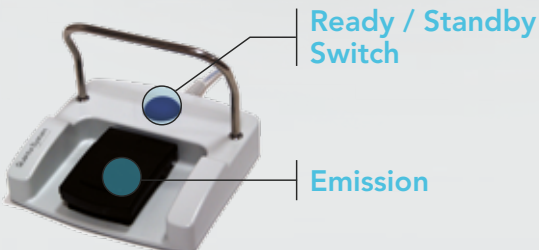


Pilot Laser
Continuous or
blinking

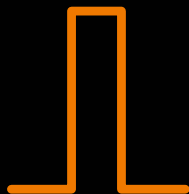
Frequency
Up to 30 Hz

Fiber Diameter
200-1000 μm

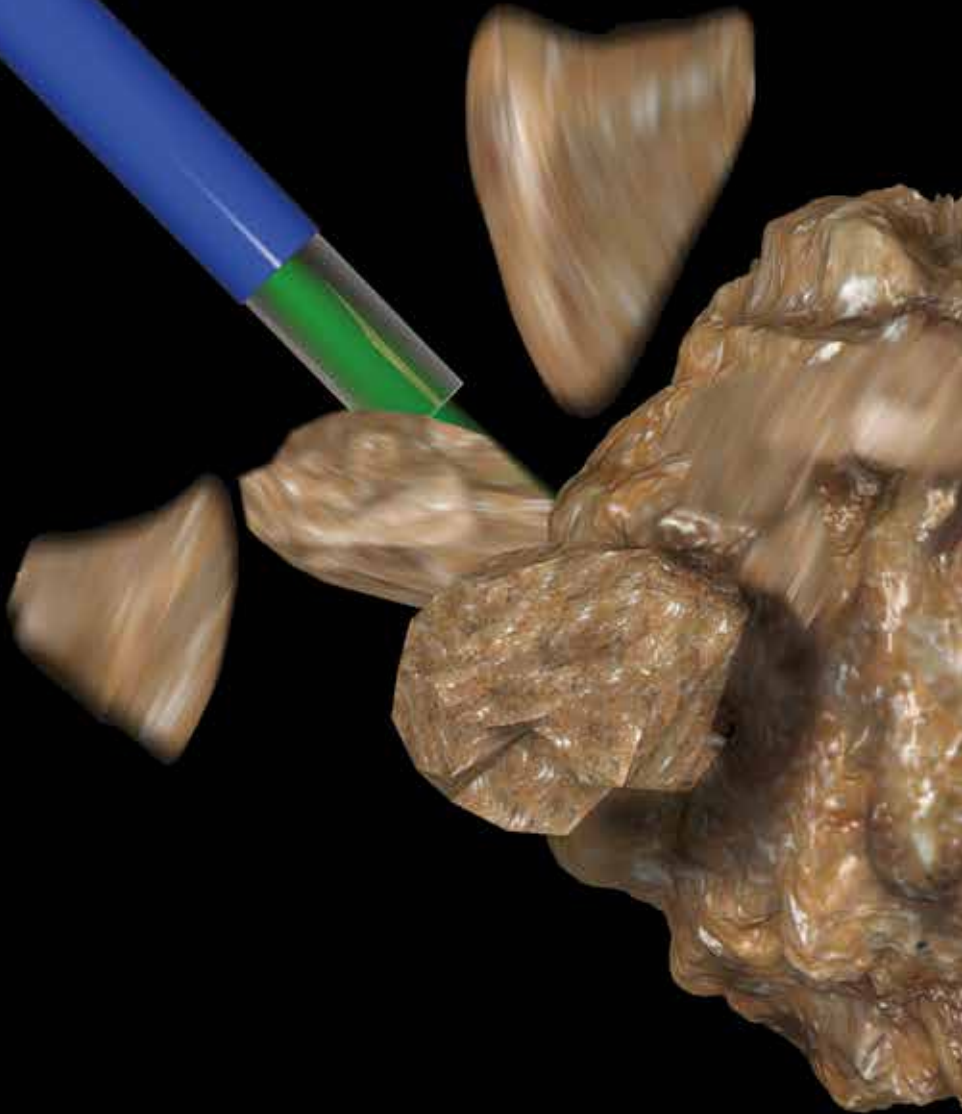
FOOTSWITCH



Fragmentation



**SHORT
PULSE**



HIGH PULSE ENERGY

Up to 5 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 μ s, for smooth ablation



LIMITED RETROPULSION

Easy ablation with no need to fetch stone



NO NEED FOR BASKET

The obtained fine dust obviates the retrieval phase



The Excellence in its Category

HIGH POWER
Up to 35 W,
for faster tissue incision



HIGH PULSE ENERGY
Up to 5 J,
for the fragmentation
of the hardest stones



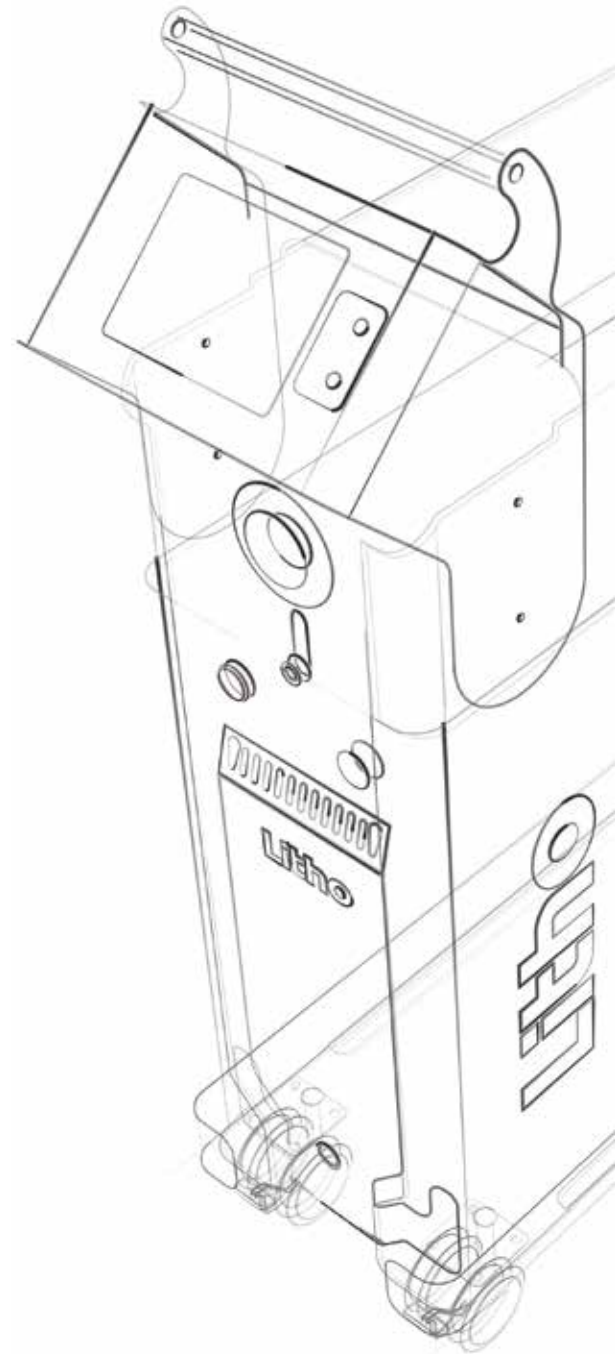
HIGH FREQUENCY
Up to 30 Hz,
for faster low energy ablation



LARGE PULSE WIDTH RANGE
Up to 1500 μ s,
for superior *Dusting* lithotripsy



FLEXIBILITY
High power also with small fibers



NUMBERS OF VERSALITY

Models

3

Emission Modes

4

Fiber Diameters

6

Fiber Types

4

Reliability

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

1000+

INSTALLATIONS WORLDWIDE

25+

COUNTRIES WHERE INSTALLED

200+

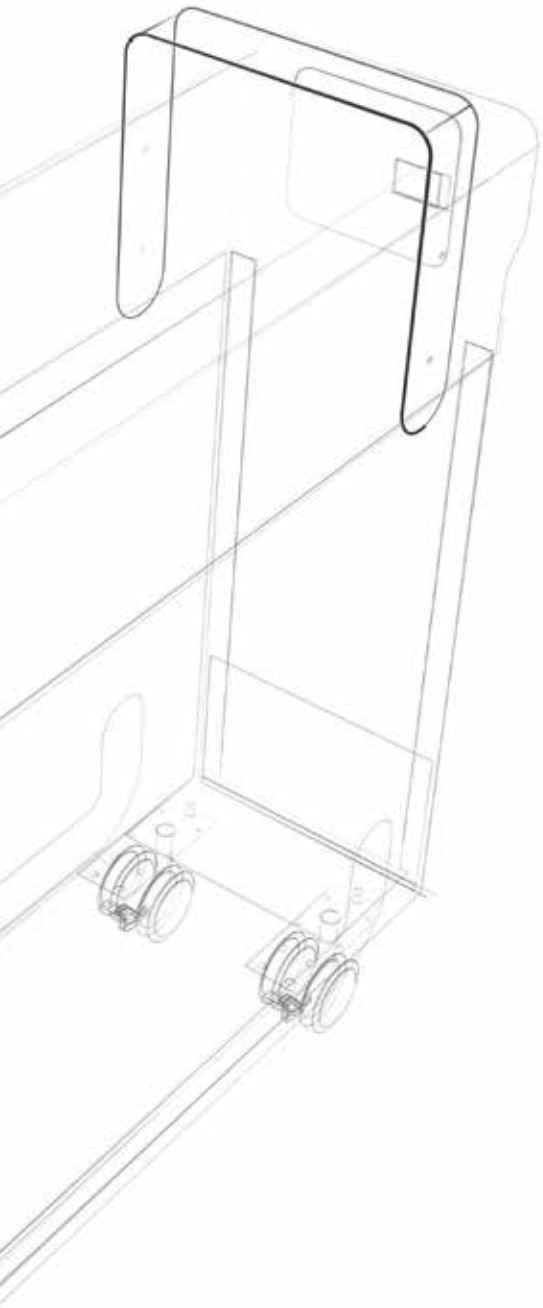
DOCTORS TRAINED AT
OUR REFERENCE CENTERS

2008

INTRODUCTION OF
THE FIRST LITHO MODEL

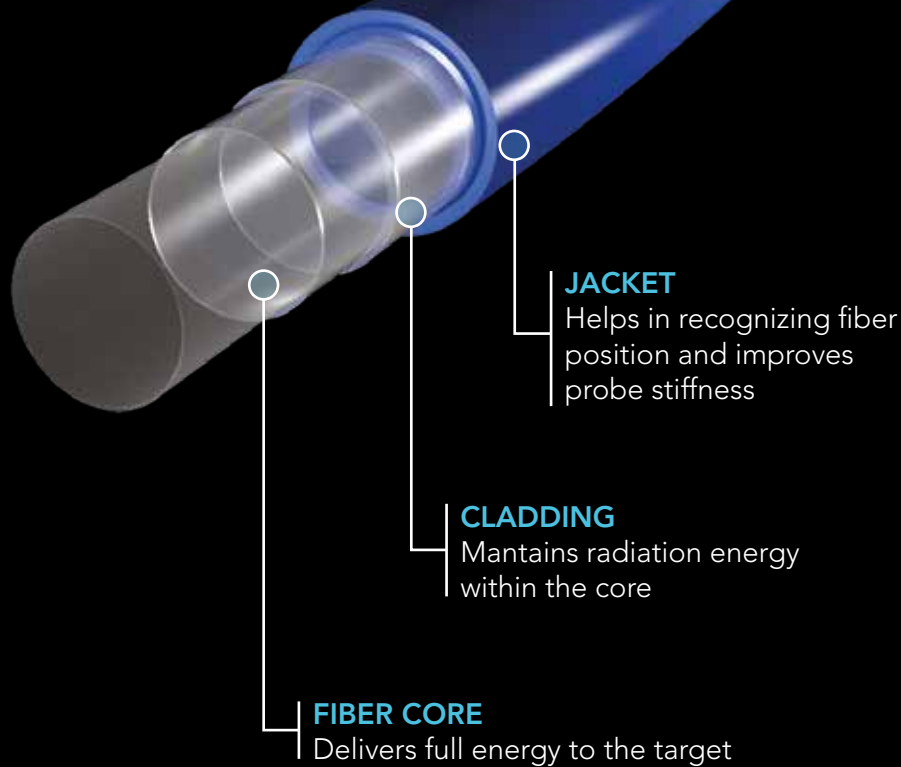
150+

AVAILABLE COMBINATIONS OF ENERGY,
FREQUENCY AND PULSE WIDTH



Fibers

Litho 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 automatically adjusts emission settings based on the connected fiber diameter



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

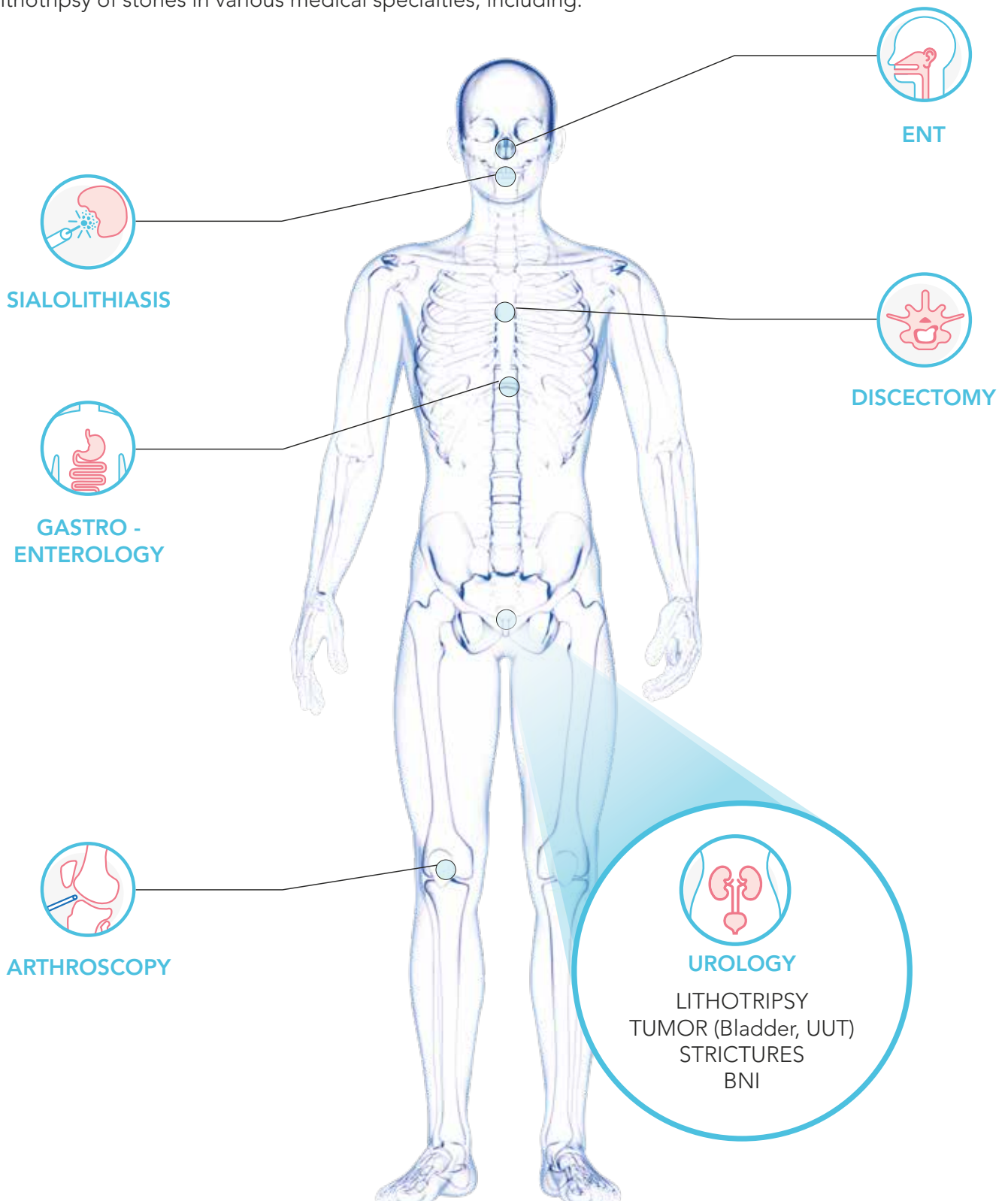


STERILIZATION TRAY

A dedicated fiber and tool sterilization tray is available

Applications

Litho 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

	30 W Model	35 W Model
Average power	30 W	35 W
Repetition rate	3 ÷ 25 Hz	3 ÷ 30 Hz
Energy per pulse	0,2 ÷ 4 J	0,1 ÷ 5 J
Wavelength	2,1 µm	
Pulse duration	95 ÷ 1500 µs	
Beam delivery	Wide range of flexible silica fibers	
Recognition fiber	RFID System	
Activation	Double Footswitch	
Aiming beam	532 nm, (adjustable <5mW) - Class 3R	
Electrical requirements	230 Vac, single phase; 50/60 Hz; 10 A 115 Vac, single phase; 50/60 Hz; 20 A	
Cooling	Closed water-air cooling circuit	
Operating temperature	10°C ÷ 30°C	
Dimensions and weight	26 cm (W) x 84 cm (D) x 92 cm (H) - 86 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

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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 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.

