

## **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

## Emission Mode

Lithotripsy and Soft Tissues

Holmium	Standby
Fiber 365 µm	Energy 3 J Total 0 J
Frequency 10 Hz	Power 30.0 W
Pilot Laser 10	Counter 0
	Menu Mode

- **Fiber Diameter**  
200-1000 µm
- **Frequency**  
Up to 30 Hz
- **Pilot Laser**  
Continuous or blinking
- **Energy**  
Up to 5 J
- **Power**  
Up to 35 W

## RFID Recognition System

## Fiber Connection

## Frontal Footswitch Connection

## Easy to Move

## FootSwitch



## Ready / Standby Switch

## Emission

Fragmentation

Dusting Effect



SHORT  
PULSE



LONG  
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



**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

# The Excellence in its Category

# Reliability

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

**HIGH POWER**  
Up to 35 W,  
for faster tissue incision



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



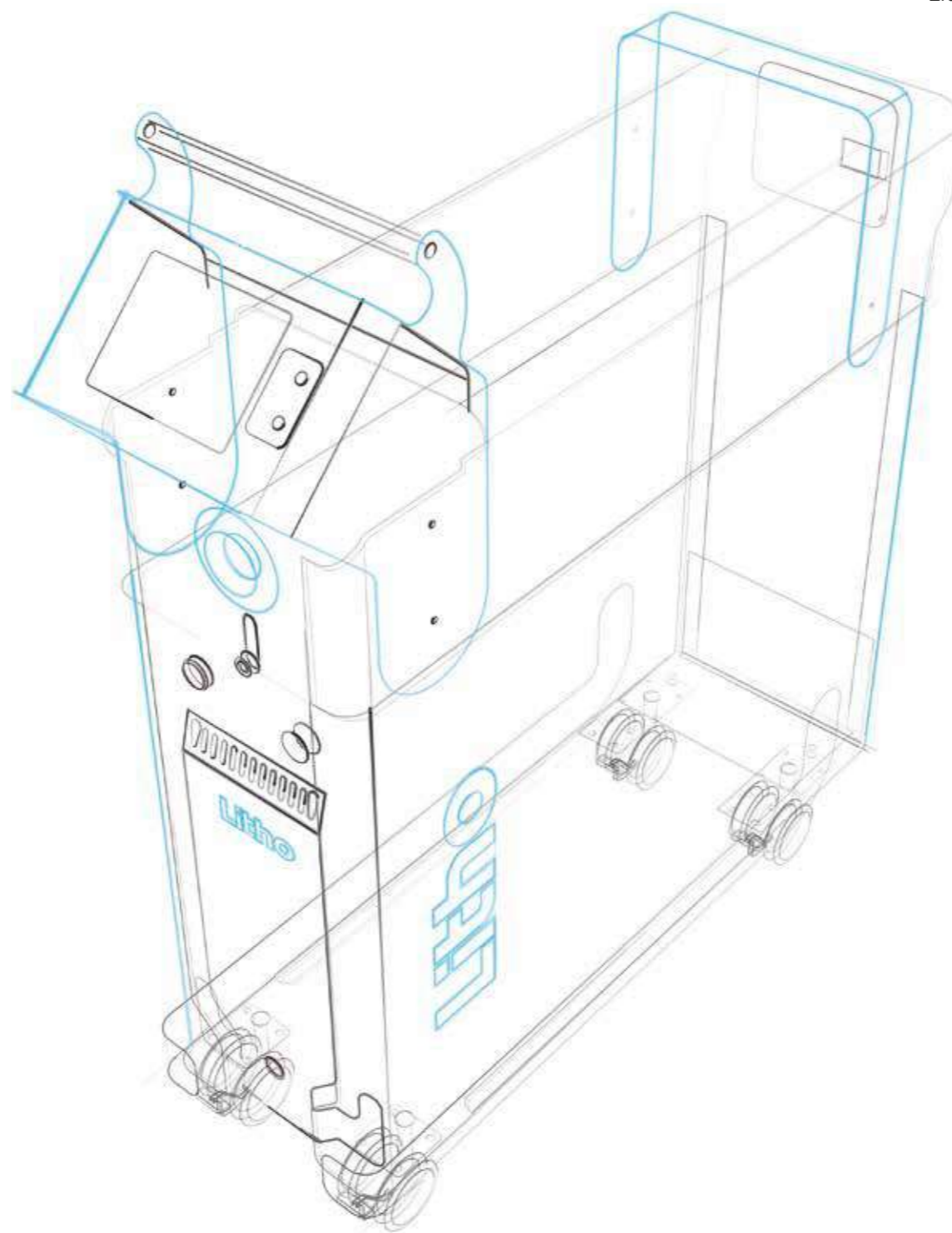
**HIGH FREQUENCY**  
Up to 30 Hz,  
for faster low energy ablation



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



**FLEXIBILITY**  
High power also with small fibers



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

## NUMBERS OF VERSALITY

Models 3

Emission Modes 4

Fiber Diameters 6

Fiber Types 4

# 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



## 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

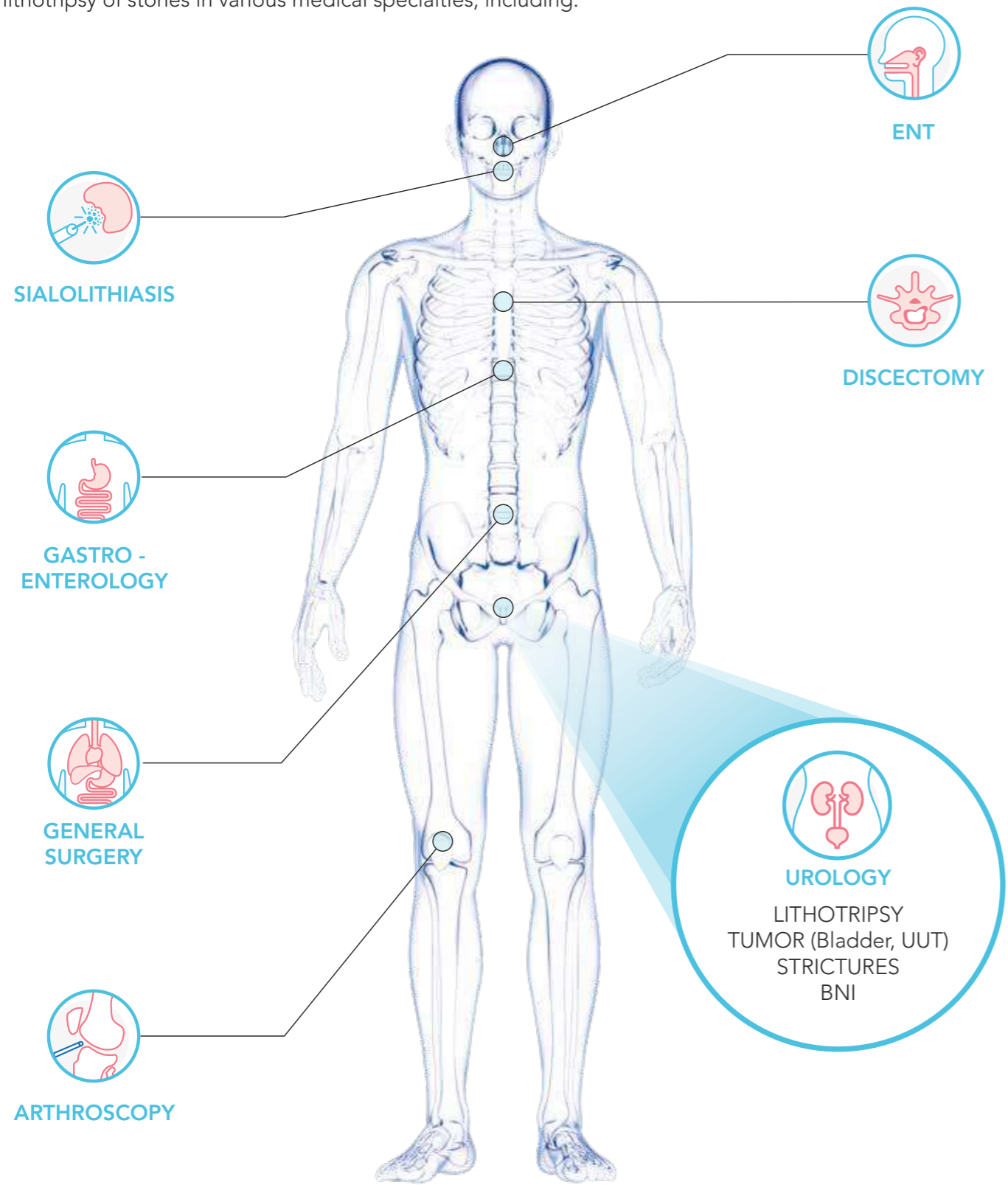


## STERILIZATION TRAY

A dedicated fiber and tool sterilization tray is available

# Applications

**Litho** 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	