

*Taking care of people, our masterpieces*

# Litho DK30

State-of-the-art Desktop  
30 W Holmium:YAG Laser





## LITHO DK30

### STATE-OF-THE-ART DESKTOP 30 W HOLMIUM:YAG LASER

Quanta System, thanks to the latest technology innovations, has collected in an extremely compact desktop system, the excellence of the Holmium:YAG - 30 W Laser.

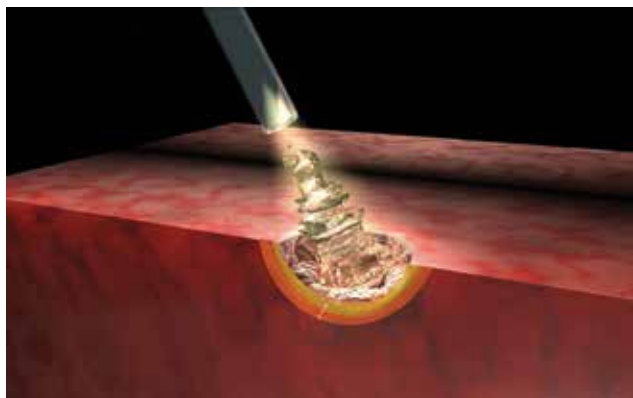
The **Litho DK30** can deliver up to **4 J per pulse**, it has a **repetition rate up to 25 Hz** and offers the possibility to regulate the pulse to achieve the desired clinical effect (ex. Dusting Effect).

**Litho DK30** is a contemporary desktop Holmium unit equipped with a series of technological solutions designed for surgery.

**Litho DK30** surgical unit is based on Holmium (Ho:YAG) laser with emission at two micron (2100nm) wavelength. This wavelength is highly absorbed by water and biological tissue. The **Litho DK30** automatically adjusts the correct pulse duration depending on the operating mode and sets the values of energy and repetition rate. When it is operating in a short pulse emission mode, it is highly effective in the fragmentation of calculi and the hard tissue ablation.

In long pulse emission, it is highly effective in cutting soft tissue providing excellent hemostasis and coagulation with minimal damages of surrounding tissue, due to its low penetration depth. Because of the high radiation absorption by water, the application in a hydrous solution environment is highly safe.

Depth of Coagulation 0.3 - 0.4 mm





## DUSTING EFFECT, AN ADDED VALUE

Quanta System introduces a new application setting: the Lithotripsy DUSTING EFFECT. This preset Application can be found on the main application menu beside Lithotripsy HARD STONE, Ablation and Coagulation.

This setting is intended for calculi, especially the renal ones, where the dusting effect lithotripsy technique could eliminate the need for basket extraction, enabling total procedure reduction.

The employment of extended pulses and the broad regulation possibilities (concerning laser intensity and frequency) allow to adapt the treatment to calculus dimension and properties, strongly reducing repulsion effects.

## TECHNICAL FEATURES

- up to **4 J** Energy per Pulse
- up to **25 Hz** - Repetition Rate
- **95-1500  $\mu$ s** - Pulse Duration
- **RFID Automatic Fiber Recognition System**
- **10.4" Touchscreen**
- **Double Footswitch**
- Automatic Aperture Sensor
- Frontal Footswitch Connection
- Blast Shield Smart Access

## OPERATIVE MODE

- Ablation
- Coagulation
- **Lithotripsy - Dusting Effect**
- **Lithotripsy - Hard Stone**

## APPLICATIONS

LITHOTRIPSY  
EXCISION OF BLADDER TUMORS  
URETEROTOMY, URETHROTOMY  
TRANSURETHRAL INCISION OF PROSTATE (**TUIP**)  
GENERAL SURGERY



**Blast shield smart access**

Through the **RFID fiber recognition system**, the connected fibers are automatically detected. The laser immediately sets up the adequate working parameters.



The **double footswitch** allows operator to control the Ready/Standby status directly by the footswitch without using the touchscreen.

The **Automatic aperture sensor** enables the operator to connect the Quanta System fiber with one hand and without any contact with non-sterile parts.



**Frontal footswitch connection**

**Wide color 10.4\"/>**



# LITHO DK30 *IN BRIEF*

*Output Power up to 30 W*

*High Peak Power*

*Variable Pulse Width*

*Large Dynamic Power Range*

*Green Aiming Beam*

*Compact Desktop System*

*Dusting Mode*

*Low Maintenance and Minimal  
Operating Costs*

*Easy to Install and to Operate*

*RFID Fiber Detection System*

*Automatic Aperture Sensor*

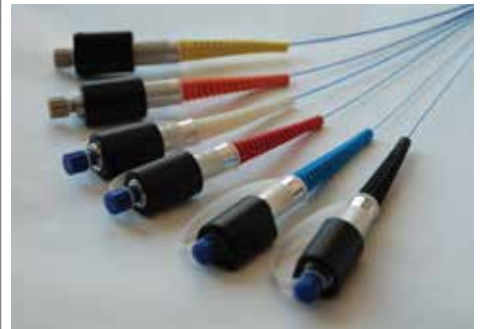
*Double Footswitch*

*Fast Warm Up*

*Intelligent Fiber Recognition*

## OPTIONALS & ACCESSORIES

- Sterile single use or reusable fibers with core diameter ranging from 200  $\mu\text{m}$  to 1000  $\mu\text{m}$ , 3m long
- Sterile single use core diameter 600  $\mu\text{m}$  side fiber, 3m long

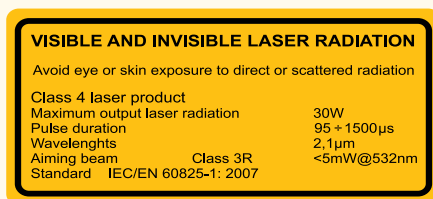


- Adjustable Fiber Optic Stripper
- Special Sterilizable Fiber Optic Stripper
- Handpiece for Open Surgery Treatment
- Ceramic Scissors



## TECHNICAL SPECIFICATIONS

Wavelength	2,1 $\mu$ m
Average power	Up to 30 W
Repetition rate	3 $\div$ 25 Hz
Energy per pulse	0,2 $\div$ 4 J
Pulse duration	95 $\div$ 1500 $\mu$ s
Beam delivery	Wide range of flexible silica fibers
Recognition fiber	RFID System
Laser aperture	Automatic (proximity sensor)
Aiming beam	532 nm, (adjustable <5mW) - Class 3R
Electrical requirements	100-120 Vac; 50/60 Hz; 16 A - 200-240 Vac; 50/60 Hz; 10 A
Cooling	Air cooled (closed water-air cooling circuit)
Operating temperature	10°C $\div$ 30°C
Humidity	30% - 85% (no condensing)
Dimensions	495 (W) x 565 (D) x 373 (H) mm <sup>3</sup>
Weight	40 kg
Laser Class	4 (IEC/EN 60825-1:2007)



*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 EN ISO 9001:2008 and EN ISO 13485:2012 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.

