

Litho

30W Holmium:Yag SURGICAL LASER SYSTEM for Lithotripsy



HIGH PEAK POWER

VARIABLE PULSE WIDTH

LARGE DYNAMIC POWER RANGE

GREEN AIMING BEAM

SMALL FOOT PRINT DEVICE

DUSTING MODE

LOW MAINTENANCE AND
MINIMAL OPERATING COST

EASY TO INSTALL AND
TO OPERATE

RFID FIBER DETECTION SYSTEM

Quanta System Q1
LASER IN OUR DNA

Holmium Surgical Laser System

Why the 2,1 μ m laser wavelength?

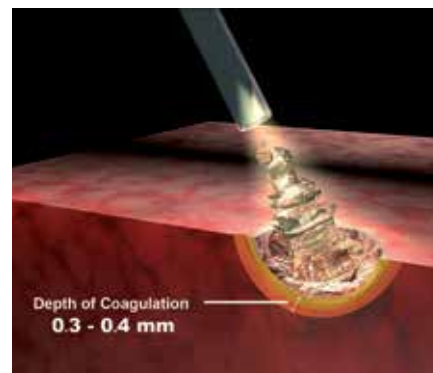
Litho surgical system is based on Holmium laser with emission at two micron wavelength.

This wavelength is highly absorbed by water and biological tissues.

The laser is operating only in pulsed mode. When it is operating in short pulse emission mode it is highly ef-

fective in the fragmentation of calculi and in the hard tissue ablation. In long pulse emission mode it is highly effective in cutting soft tissues providing excellent haemostasis and coagulation with minimal damages of surrounding tissues due to its low penetration depth.

Thanks to its high water absorption the application in a hydrous solution environment is highly safe.



Applications

- Lithotripsy
- Excision of bladder tumors
- General Surgery
- Ureterotomy, Urethrotomy
- Trans Ureteral Incision of Prostate (TUIP)

Dusting Effect, an added value

Quanta System introduces a new application setting: the Lithotripsy DUSTING EFFECT.

This preset Application is inside the main application menu, beside Lithotripsy HARD STONE, Ablation and Coagulation.

The setting is intended for calculi, especially the renal ones, where the dusting effect lithotripsy technique could eliminate the need for basket extraction and that way reducing the total time of the procedure.

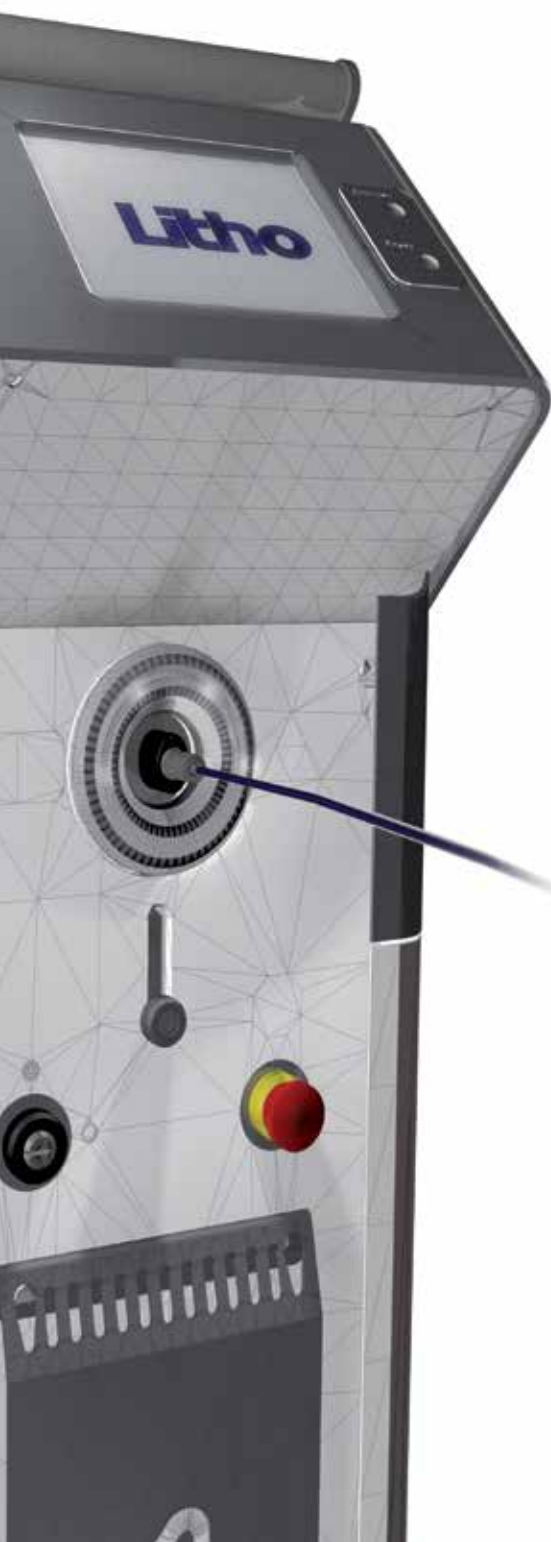
Due to the extended pulse properties, the specific settings of repetition rate and pulse energies,

characteristic for dusting lithotripsy, assures a more stable position of the calculi.



Operative Mode

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

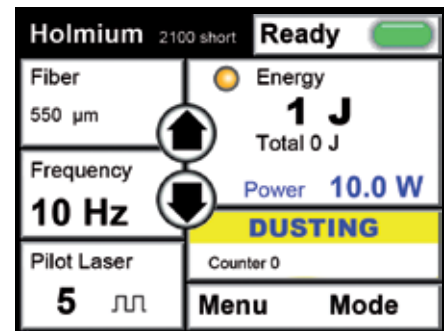


Technical Features

- **up to 30W** - Power Output
- **up to 4J** Energy per Pulse
- **up to 25 Hz** - Repetition rate
- **95-1500 μ s** - Pulse duration
- **RFID Fiber Recognition System**
- Display Touch Screen
- **Double Footswitch**
- Frontal Footswitch Connection

Smart Interface

Interactive interface with intuitive shortcut to the main function. Smart selection of output setting depending to the operative mode. Wide Color Touch screen.



Double Footswitch

The double footswitch with front connector allows operator to control the Ready/Standby status directly from the footswitch without the need of assistance in operation by touchscreen.



Accessories

Surgical Laser Fiber

Sterile single use and reusable fibers with core diameter ranging from 200 to 1000 micron.

Optionals

- Fiber Handpiece
- Adjustable Fiber Stripper
- Fixed Sterilizable Fiber Strippers
- Ceramic Fiber Scissor



Special Sterilizable
Fiber Stripper



Fiber Stripper



Flexible Fiber



Ceramic Fiber Scissor



Optical Fiber

TECHNICAL SPECIFICATIONS

Wavelength	2,1 μ 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 μ s
Beam delivery	Wide range of flexible silica fibres
Recognition fiber	RFID System
Activation	Double Footswitch
Aiming beam	532 nm, (adjustable <5mW) - Class 3R
Electrical requirements	230 V ac, single phase; 50/60 Hz; 10 A 115 V ac, single phase; 50/60 Hz; 20 A
Cooling	Air cooled (closed water-air cooling circuit)
Operating temperature	10°C \div 30°C
Storage temperature	5°C \div 40°C
Humidity	30% - 85% (no condensing)
Dimensions	260mm (W) x 840mm (D) x 920mm (H)
Weight	80 kg
Laser Class	4 (IEC/EN 60825-1:2007)

VISIBLE AND INVISIBLE LASER RADIATION

Avoid eye or skin exposure to direct or scattered radiation

Class 4 laser product	
Maximum output laser radiation	30W
Pulse duration	95 \div 1500 μ s
Wavelengths	2,1 μ m
Aiming beam	Class 3R
Standard	IEC/EN 60825-1: 2007
	<5mW@532nm

D N A L A S E R T E C H N O L O G Y

Distributor



CAUTION - Laser radiation when open and interlocks defeated

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 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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