

For Stone Management & Soft Tissue





An Indispensable Tool for Endourologists

The holmium laser wavelength is ideal for endourology. It is highly absorbed by water making it highly efficient for disintegrating calculi in an aqueous environment or ablating tissue in contact mode.

The holmium laser effectively broadens endoscopy from a diagnostic to a therapeutic modality. Traditional concerns of lateral tissue damage due to a misdirected fiber is minimized because most of the laser energy is absorbed by the aqueous environment leaving almost no energy to damage surrounding tissue.

The Odyssey 30 patented variable pulse width technology generates high peak power pulses for fragmenting calculi and generates longer exposure pulses for coagulation of soft tissue for maximum versatility in urinary tract applications.

By optimizing the laser output mode, the Odyssey 30 enhances the inherent properties of the holmium wavelength, making it an ideal surgical tool for endourology and many other surgical specialties.



Fast-Rise-Time Top-Hat Waveform for More Efficient Delivery of Useful Laser Energy

The Odyssey proprietary control system replaces the highly inefficient Gaussian Waveform with the Fast-Rise-Time Top-Hat Waveform. This Fast-Rise-Time Top-Hat Waveform feature delivers zero to maximum peak power efficiently to break stones throughout the urinary tract. The significantly higher efficiency and efficacy of the Odyssey laser can be demonstrated by observing clinical effectiveness at comparable power settings on side-by-side comparisons with other traditional design holmium medical laser systems.



Fast-Rise-Time Top-Hat Waveform

Multi-specialty Clinical Indications



- Fragmentation of urinary calculi - Urethral and ureteral strictures
- Bladder neck obstructions
- Superficial bladder carcinomas
- Soft tissue removal



ENT and TMJ

- Anterior hand & muscle release
- Cauterization of bleeding vessels - Debridement of cartilage
- Discoplasty
- Ethmoidectomy Excision, vaporization of trachea and cricold cartilage
- Frontal sinusotomy - Laser Assisted Uvulopalatoplasty
- Tonsillectomy
- Nasal polyps



- Chondronlasty
- Excision of meniscal cyst
- Lateral retinacular release
- Meniscectomy
- Plica removal Resection of anterior cruciate ligament
- Synovectomy - Osteochondral fracture debridement - Removal of scar tissue



- Laser-assisted spinal endoscopy - Laser lumbar disc decompression



All soft tissue open and endoscopic procedures



Shoulder, Wrist and Elbow

- Bursectomy
- Chondroplasty - Labral tear resection
- Release of coracoacromial
- ligament
- Removal of scar tissue Subacromial decompression
- Synovectomy
- Osteochondral fracture debridemeny



- All soft tissue open and endoscopic procedures
- Appendectomy
- Hemorrhoidectomy - Lysis of adhesions
- Polyp removal

Proprietary Variable Pulse Width Technology

The Odyssey 30 switches between 350µm and 700µm pulse widths with a simple touch

The Shorter Pulse Width

At 350 microseconds - Stone fragmentation at its best

"Conclusions: These results confirm that the holmium laser is an excellent and safe device for intracorporeal lithotripsy, with the ability to fragment stones of all compositions. It has particular efficacy in complex clinical presentations and, if the efficacy of soft tissue applications is confirmed, the holmium laser may represent a cost effective, multipurpose urologic laser."

Principles and Applications of Laser Lithotripsy: Experience with the Holmium Laser Lithotrite, Journal of Clinical Laser Medicine & Surgery

> Michael Grasso, M.D. and Yuly Chalik, M.D. Lenox Hill Hospital, New York, NY 10075

The Longer Pulse Width

At 700 microseconds - Retropulsion is reduced

"Conclusions: The longer pulse width setting with the Ho:YAG laser results in less displacement of phantoms after one pulse and allows more energy delivery prior to movement with continuous pulses.

This was found to be the case regardless of laser fiber diameter or pulse energy. Clinically, adjusting the laser to the longer pulse width may cause lessretropulsion at the same laser settings, thereby improving the efficiency of stone fragmentation."

Effect of Pulse Width on Object Movement in Vitro Using Holmium: YAG Laser, Journal Of Endourology

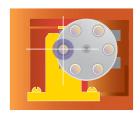
Pankaj Kalra, M.D., Demetrius Bagley, M.D., et-al. Jefferson Medical College, Philadelphia, PA 19107

"Conclusions: Variable pulse-width lasers allow the operator to control retropulsion. When treating ureteral calculi, retropulsion can be reduced by using a longer pulse width without compromising fragmentation efficiency. For caliceal calculi, a longer pulse width, provides slightly more effective stone fragmentation."

Effect of Holmium: YAG Laser Pulse Width on Lithotripsy Retropulsion In Vitro, Journal Of Endourology

David S. Finley, M.D., Elspeth McDougall, M.D., Ralph V. Clayman, M.D., et-al. University of California, Irvine Medical Center, Orange, CA 92868

Odyssey 30™ Innovative Features



Motorized Rotating Blast Shield

The built-in rotating six blast shield system eliminates the need to stop the procedure when a blast shield is damaged. With a touch on the control panel, a fresh blast shield rotates into place in seconds.



Intelligent Connector

The Odyssey 30 communicates with the fiber connector to identify the fiber type, to activate only if the right fiber is connected, and to limit the maximum power output for smaller core fibers to prevent over-power delivery.

Onvergent Laser Technologies is dedicated to the development of advance medical laser systems for cardiovascular, general surgical, dental, aesthetic, ENT, GI, GYN and urological applications. Convergent laser systems are especially designed to be highly efficient, stable, reliable, cost effective and user-friendly. Convergent laser systems are also significantly lighter, more compact and requires less electrical power compared to other medical lasers.

The Odyssey product line is the leading stone management lithotripsy laser that is sold worldwide and well acknowledged as the premium holmium laser lithotripsy system.

The entire Convergent team of highly skilled engineers, technicians, customer support and field sales personnel are committed to excellence in quality and service as mandated by its company founders. All Convergent products are proudly designed and manufactured in the USA.



Specifications	
Laser Modes	Pulse Holmium: YAG
Wavelength	2100nm
Visible Aiming Beam	532nm (green), 3 mW adjustable
Pulse Energy	0.4 to 3.0 Joules per pulse
Maximum Average Power	30 Watts
Electrical Requirements	110 VAC
Repitition Rate	5 to 20 Hz
Pulse Duration	350 and 700 microsecond
Dimensions	16" W (41cm) x 33" D (84 cm) x 40" H (102 cm)

Features & specifications subject to change without prior notice. Document Number: 211185-01 A1



1660 South Loop Road, Alameda, CA 94502 Tel: 510-832-2130 • Fax: 510-832-1600 E-mail: info@convergentlaser.com Website: www.convergentlaser.com



