

# UltraPulse® DUO

For those who demand excellence



**When it comes to superior precision and high-end performance, UltraPulse CO<sub>2</sub> laser is the ultimate solution.**

Now, Lumenis brings to you the UltraPulse DUO, a CO<sub>2</sub> laser system that caters to physicians and surgical centers who demand excellence from themselves and their laser system. The UltraPulse DUO was meticulously developed with physicians and based on decades of accumulated experience and the Lumenis innovative approach, to meet a growing number of clinical challenges today.

The UltraPulse DUO system is designed to deliver CO<sub>2</sub> laser energy via an articulated arm or through a Lumenis CO<sub>2</sub> laser fiber. With UltraPulse DUO you don't have to compromise – you can have the precision you desire as well as access to hard-to-reach anatomies.

The Lumenis UltraPulse DUO is the CO<sub>2</sub> laser system that allows surgeons to achieve the Master's Touch.



How can  
UltraPulse DUO  
benefit your  
practice?



**Seamlessly alternate between the CO<sub>2</sub> energy deliveries to ensure optimal patient care.**

**Leave no disease behind**

With the vital combination of precision and flexibility, you can be prepared for any challenges during a procedure. The comprehensive set of tools enables a complete operation without the need for additional procedures and hospitalization.

**Experience clear and char-free margins**

Better oncological outcomes as a result of better margin visibility. Clear and clean margins are a true value in pathology and a top goal in today's operating room.

**Smart tissue management**

High preservation of adjacent delicate tissue results in fewer adverse events, adhesions and quicker recovery time.

**Save on operating room costs**

Progress from the operating room to the outpatient environment saves costs, reduces the risks of general anesthesia, and enables periodic treatment of recurring conditions.

# Combining unparalleled precision with flexibility.

UltraPulse DUO combines the unparalleled precision of the Digital AcuBlade™ Scanning Micromanipulator with the flexibility of the FiberLase CO<sub>2</sub> laser fiber.

Exclusively shaped for the articulated CO<sub>2</sub> laser arm, the Digital AcuBlade Micromanipulator with SurgiTouch scanner delivers laser energy inside a user defined geometric shape. The rapid motion of the scanner, faster than a human hand can produce, takes the energy delivery and entire operation to its highest precision, resulting in:

**Maximum control** over incision length, ablation area and treatment depth.

**Replicated tissue interaction**, customized to patient anatomy and the shape of the undesired tissue.

**Reduced operating time** compared to conventional CO<sub>2</sub> laser microsurgery.

*"I've used lasers for 30 years, primarily CO<sub>2</sub> lasers. I find the Digital AcuBlade a game changer by providing precise control and automatic treatment of large areas on the vocal cords in shapes of lines and circles that conform to the anatomy in a much faster and precise technique than the one that can be achieved by a human hand controlling the micromanipulator."*

Mark Courey, M.D., Professor, University of California, San Francisco  
Otolaryngology – Head and Neck Surgery Director, Division of Laryngology

The CO<sub>2</sub> laser fiber is highly durable and flexible. Accompanied by a collection of dedicated operational tools, the CO<sub>2</sub> fiber allows easy access to difficult-to-reach anatomy and provides a variety of delicate treatment options.

**Adjustable aiming beam**

that enables precise positioning to ensure the desired tissue is targeted.

**Renewable tip**

that can be cleaved and revived during use, facilitating smooth operation and cost effectiveness.

**60% greater energy transmission**

that enables safe and effective transfer of optimal levels of CO<sub>2</sub> energy (in comparison to other CO<sub>2</sub> fibers).

**30% longer fiber**

that provides extended steering capabilities and greater convenience in the operating sphere (in comparison to other CO<sub>2</sub> fibers).





The advanced user interface is not only user friendly and easy to adopt but provides the ability to customize and save any set of parameters during a procedure.

# Optimizing your surgical tool to the fullest.

UltraPulse DUO is an advanced computer-controlled, user-friendly CO<sub>2</sub> pulsed laser platform. It is based on a patented CO<sub>2</sub> laser tube providing up to 60 watts of power. It can generate a continuous series of short-period, high-peak-power pulses. During the high peak power, the laser energy is delivered very rapidly, resulting in vaporization of the targeted tissue without the creation of collateral injury.

The Lasing modes (UltraPulse and Continuous Wave) can be alternated according to the desired tissue interaction while the three exposure modes (Repeat, Single & Constant) will allow comprehensive timed-controlled energy delivery.

# Opening a whole new sphere of care.

UltraPulse DUO is intended for use in surgical applications requiring the ablation, excision, incision and coagulation of soft tissue. A wide range of indications for use will ensure the laser system is fully utilized within the healthcare facility. A partial list of indications includes:



## Otolaryngology (ENT)

Benign and malignant lesions:  
Oral, Nasal, Pharynx, Larynx,  
Trachea and Ear.

Papillomatosis,  
Tonsillectomy, Bronchoscopy,  
Subglottic and Tracheal  
Stenosis, Stapedotomy,  
Cholesteatoma, Myringotomy



## Gynecology

(including laparoscopy and  
robotic assisted surgery)

Endometriosis, Excision/  
lysis of adhesions, Uterine  
myomas and fibroids, Ovarian  
fibromas and follicle cysts.  
Uterosacral ligament ablation,  
Hysterectomy, Conization of  
the cervix



## Neurology

(Neurological indications  
for treatment of the  
Central Nervous System  
are only for USA)

Posterior fossa tumors,  
Peripheral neurectomy.  
Benign and malignant tumors  
and cysts, acoustic neuromas,  
lipomas. Arteriovenous  
malformation, Pituitary  
gland tumors

The UltraPulse Technology yielded substantial clinical evidence throughout the years, which are published in leading reviewed journals. Please visit our website or contact your Lumenis representative for a comprehensive list of publications.

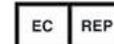
# Achieve the master's touch.

Laser Type	Sealed CO2 Laser, RF (radio frequency) excited		
Wavelength	10.6 micron, (invisible, infrared, TEM00)		
Delivery Modes	Free Beam (articulated arm) and Fiber		
Power Modes	Continuous Wave (CW), UltraPulse (UP)		
Pulse Energy and Power Range	System Voltage (VAC)	Power Range Arm/Fiber	Energy per UP Pulse and Available Power Range
	200/208/220/230/240	1-60/1-40 W	2-225 mJ 1-60 W
	100/110/115/120	1-60/1-40 W	2-175 mJ 1-60 W 176-225 mJ 1-20 W
Pulse Duration	Up to 2 ms		
Timed-Exposure Modes	Single, Repeat and Constant		
SurgiTouch Operating Functions	<p>Application driven user interface for ENT, GYN, NEURO and General</p> <p>Utilizes highly focused scanned beam.</p> <ul style="list-style-type: none"> <li>• User-selectable application oriented scan geometries</li> <li>• Scan shapes: straight or curved line for incision, circle for ablation</li> <li>• Scan size: range varies depending on procedure</li> </ul> <p>1-9 Passes can be selected for depth level set up</p>		
Electrical	100-120 VAC input power, 20A, 50/60Hz 200-240 VAC input power, 16A, 50/60 Hz		
Aiming Beam	Red diode laser (635 nm) 6 settings (up to 5mW maximum) Electable for Continuous or blinking modes		
Cooling	Self-contained, closed cycle		
Gas Management	Electronically controlled with user controls Internal (low flow) or external (high flow) with bacterial filter; electronically controlled		
Purge air exiting fiber			Maximum Pressure
	From internal pump		8~10 psi
	From external source set to 60 psi		60 psi
Dimensions	Base footprint (W X D X H): 34 X 51 X 100 cm H* (13.6" X 20" X 40" H*) System height to top of folded arm: 195 cm (77 in)		
Weight	132 kg (291 lbs)		
Certifications and approvals	Lumenis is ISO 13485:2012 certified, UltraPulse DUO is CE approved and FDA cleared.		



**Manufactured by Lumenis Ltd. Yokneam**

Industrial Park 6 Hakidma Street  
P.O.B. 240 Yokneam 2069204, Israel  
T +972-4-959-9000



**Lumenis (Germany) GmbH**

Heinrich-Hertz-Str 3 D-63303  
Dreieich-Dreieichenhain GERMANY  
T +49 (0) 6103 8335 0



© 2015 All Rights Reserved. The Lumenis Group of Companies. PB-2002934 Rev A



**AMERICAS**  
San Jose, CA, USA  
T +1 408 764 3000  
+1 877 586 3647  
F +1 408 764 3999

**EMEA**  
Dreieich Dreieichenhain,  
Germany  
T +49 6103 8335 0  
F +49 6103 8335 300

**Roma (RM), Italy**  
T +39 06 90 75 230  
F +39 06 90 75 269

**Hertfordshire, UK**  
T +44 20 8736 4110  
F +44 20 8736 4119

**JAPAN**  
Tokyo, Japan  
T +81 3 4431 8300  
F +81 3 4431 8301

**ASIA / PACIFIC**  
Beijing, China  
T +86 10 5737 6677  
  
Gurgaon, India  
T +91 124 422 07 95  
  
Kowloon, Hong Kong  
T +852 217 428 00  
F +852 272 251 51



WWW.LUMENIS.COM/SURGICAL