

UltraPulse SurgiTouch

Ultra-precise laser-tissue
interaction



When it comes to superior precision and high-end performance, UltraPulse CO₂ laser is the ultimate solution.

For decades the UltraPulse® technology is considered as the gold standard when it comes to ultra-precise laser-tissue interaction.

UltraPulse ST is an advanced computer controlled, user-friendly CO₂ pulsed laser platform. It is based on patented CO₂ 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.

Taking the energy delivery and entire operation to its highest precision level by pairing the Digital AcuBlade Micromanipulator with the SurgiTouch scanner. The laser energy is delivered inside a user defined geometric shape. The rapid motion of the scanner, faster than a human hand can produce, takes the controlled operation to another level of precision, resulting in:



- › **Maximum control** over incision length, ablation area and treatment depth
- › **Minimal thermal spread** and high preservation of surrounding tissue
- › Selective 100 micron ablation, **Char free tissue interaction** with clear margins
- › **Replicated tissue interaction**, customized to patient anatomy and the shape of the undesired tissue.
- › **The rapid scanning movement** may reduce the the procedure time compared to conventional CO₂ laser microsurgery

“I’ve used laser for 30 years, primarily CO₂ 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
Head & Neck Surgery Director, Division of Laryngology.*

UltraPulse ST 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



Aesthetics

- › Skin resurfacing
- › Acne scars
- › Dyschromia
- › Uneven texture
- › Actinic keratosis
- › Lines and wrinkles
- › Uneven pigmentation
- › Skin furrows

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



Risk Information

CO₂ lasers (10.6 μm wavelength) are intended solely for use by trained physicians. Incorrect treatment settings or misuse of the technology can present risk of serious injury to patient and operating personnel. The use of Lumenis CO₂ laser is contraindicated where a clinical procedure is limited by anesthesia requirements, site access, or other general operative considerations. Risks may include excessive thermal injury and infection. Read and understand the CO₂ systems and accessories operator manuals for a complete list of intended use, contraindications and risks.

“Of the various lasers available, the CO₂ laser is the most versatile and is extremely safe because of its limited depth of penetration and minimal lateral thermal damage. This allows for use of the CO₂ laser in delicate areas where electrosurgery would be unsafe, such as the bladder, lateral side wall near the ureter, nerves, major vessels, and bowel serosa. In endometriosis patients, clinical data has demonstrated good pain control, improved quality of life, peri-operative outcomes and fertility rates with use of the CO₂ laser. The Lumenis CO₂ laser is a valuable instrument in the armamentarium of the gynecology surgeon”.

Dr. Ceana Nezhat, Atlanta Center for Special Minimally Invasive Surgery & Reproductive Medicine, GA.

Laser Type	Sealed CO ₂ Laser, RF excited		
Wavelength	10.6 micron		
Mode structure	TEM ₀₀		
Power Modes	Continuous Wave (CW), UltraPulse (UP)		
Pulse Energy and Power Range	System Voltage (VAC)	Power Range	Energy per UP Pulse and Available Power Range
	200/208/220/230/240	1-60 W	2-225 mJ 1-60 W
	100/110/115/120	1-60 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	Application driven user interface for ENT, GYN, NEURO and General Utilizes highly focused scanned beam. • User-selectable application oriented scan geometries • Scan shapes: straight or curved line for incision, circle for ablation • Scan size: range varies depending on procedure 1-9 Passes can be selected for depth level set up		
Electrical	120 V, 20A, 50 or 60 Hz, single phase 230 V, 16 A, 50 or 60 Hz single phase		
Aiming Beam	Red diode laser (635 nm) 6 settings (up to 5mW maximum) Electable for Continuous or blinking modes		
Cooling	Self-contained, closed cycle		
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)		



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

EC REP Lumenis (Germany) GmbH
 Heinrich-Hertz-Str 3
 D-63303
 Dreieich-Dreieichenhain
 GERMANY
 Tel: +49 (0) 6103 8335 0