



ACUPULSE[™] DUO

Surgical CO₂ Laser

The Versatility to Choose
the Right Treatment
for Your Patient

Advanced Technology

Driven by Patient Need

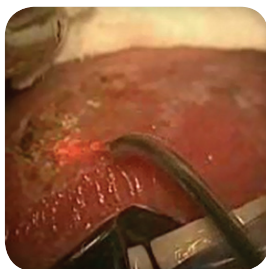
Introducing the AcuPulse DUO CO₂ laser, a unique combination of fiber and free beam energy delivery in a single device. Now, you can choose the optimal laser technology to address your patient's specific needs, without compromise, to help achieve superior clinical outcomes.

The Flexible Fiber

Dependable Fiber Delivery Where it's Needed Most

The AcuPulse DUO utilizes flexible laser fibers known for their superior durability. Fiber flexibility and the clearly visible **aiming beam** allow for superior surgical precision in difficult-to-reach anatomy.

With high energy transmission along the flexible laser fiber, surgeons can treat tissue faster and reduce treatment time.



Fiber delivery

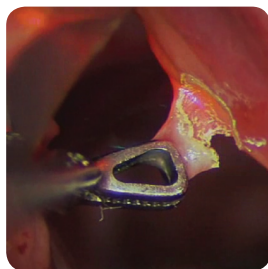
Courtesy of Prof. Marc Remacle



The Articulated Arm Superior Performance and Adaptability

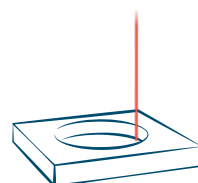
The AcuPulse DUO articulated arm delivers CO₂ laser energy through free beam accessories, such as the Digital AcuBlade™ scanning micromanipulator. The SurgiTouch scanner, driven by SurgiTouch™ software, automatically sweeps the laser beam inside a user-defined geometric shape faster than a human hand can for the highest level of surgical precision. The user has full control by selecting the size and depth of the scanning pattern and manually directing the scanning beam onto the tissue target for cutting and ablation.

Tissue treatment can be easily replicated and customized to patient anatomy. The Digital AcuBlade delivers nearly char-free margins which ensures high quality tissue samples, preservation of healthy tissues and superior visibility.

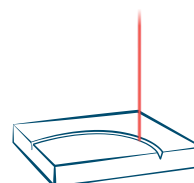


Free beam delivery

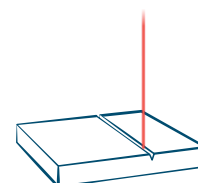
Courtesy of Prof. Marc Remacle



Ablation



Shaped cutting



Incision



Precise

- Digital AcuBlade micromanipulator delivers virtually char-free tissue margins
- Reproducible tissue-effects tailored to patient anatomy
- Aiming beam for fiber and free beam delivery

Versatile

- Two laser delivery modalities in a single system to optimize patient care
- Access difficult-to-reach tissue with the flexible fiber
- Full suite of accessories for many clinical applications



Safe

- A choice of three power modes and three timed exposure modes for customized beam delivery
- Selective 150 micron ablation with virtually no disruption to adjacent tissue
- Active port indication on console and user control panel

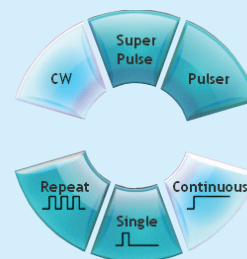
Easy to use

- Simple touch screen transition between fiber and free beam modalities
- Intuitive and simple user interface
- Longer articulating arm to extend reach

The Comfort and Control to Achieve Excellent Results

Three power and timed-exposure modes

to customize energy delivery
for smart tissue management



A full range of fiber and free beam accessories

that extend surgical capabilities and enable treatment of a broader range
of clinical applications in ENT, GYN and general surgery

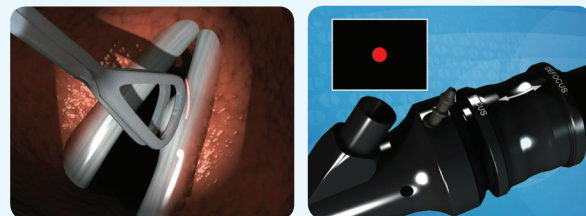
Fiber-use indicator

for convenience and planning

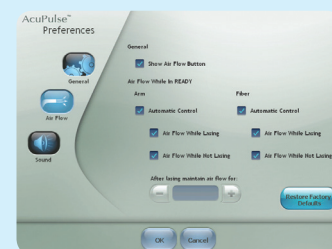


Procedure and accessory videos

for ease of training



Advanced, electronically controlled air management system



CO₂ Laser Delivery Options

A Host of Benefits and Indications

	Fiber Delivery	Free Beam Delivery
Modality Benefits	High CO ₂ Laser Precision for Cutting and Ablation; Low Thermal Damage	Highest CO ₂ Laser Precision for Cutting and Ablation; Lowest Thermal Damage
	Work in Difficult to Reach Areas and Tight Spaces	Work in Direct Line-of-Sight
	Slim Profile Rigid and Malleable Handpieces	Larger Profile Rigid Handpieces for Straight and Angled Line-of-Sight Delivery
	Compatible with Rigid and Flexible Endoscopes	Compatible with Rigid Endoscopes
	Handheld Instrument Feel	Scanner Capability
	Simple and Easy to Use	Highly Reproducible
Example Clinical Indications	Benign and Malignant Lesions: Oral, Nasal, Pharynx, Larynx, Trachea and Ear	Benign and Malignant Lesions: Oral, Nasal, Pharynx, Larynx, Trachea and Ear
	Partial Glossectomy	Reinke's Edema
	Leukoplakia: Oral, Pharynx	Leukoplakia: Hypopharynx and Larynx
	Papillomatosis, Pharynx, Larynx and Trachea	Papillomatosis, Hypopharynx and Larynx
	Subglottic and Tracheal Stenosis	Subglottic Stenosis
	Eustachian Tuboplasty	Zenker's Diverticulum
	Stapedotomy, Revision Stapedotomy	One-Shot Stapedotomy
	Removal of Endometriosis Implants	Removal of Endometriosis Implants
	Lysis of Intra-abdominal Adhesions	Lysis of Intra-abdominal Adhesions

AcuPulse DUO Technical Specifications

AcuPulse DUO Models (part number GA-1000000)

AcuPulse Models	30 / 40 / 30 ST / 40 ST (ST=with SurgiTouch system); Specific configuration kit required
Laser Type	CO ₂ Laser, sealed-off, DC excited
Wavelength	10.6 micron, infrared
Mode Structure	TEM ₀₀
Laser Operating Modes	Continuous Wave (CW), Pulser, SuperPulse (SP)
CW Power	1 – 30 W / 1 - 40 W
SuperPulse Average Power	0.5 – 10 W / 0.5 - 15 W (Timed: 0.2 – 10 W / 0.2 – 15 W)
Pulser Average Power	1 – 25 W / 1 - 35 W
Controls	<ul style="list-style-type: none"> Multi-color touch panel – high resolution Footswitch, up to 10m. Screen dimensions: 10.4 inch Electronically controlled switching between fiber and free beam
Aiming Beam	5 mW red diode laser, 635 nm, adjustable intensity, blink on/off, Diode off while lasing option.
Beam Delivery	Lightweight, carbon fiber, 7-joint, spring balanced arm, 144 cm (56.7") reach, 360 deg. rotation, Flexible fiber using the Lumenis family of CO₂ fibers
Laser Emission Indicators	<ul style="list-style-type: none"> LED illuminated indication active port Aiming beam only emits from active port Yellow lamp: Standby / Ready / Lasing Indicator Audible Tone
Memory Settings	Min. 100 + custom memory setting capacity
Cooling	Self-contained, closed cycle
Gas Management	Internal (low flow) or external (high flow) with bacteriologic filter; electronically controlled
Electrical	100 - 240 VAC, 9A (Max), 50/60 Hz Single phase
Dimensions	40 cm W x 40 cm D x 136 cm H; (15.8" W x 15.8" D x 53.5" H)
Weight	53 kg (117 lbs)
Standards	CE, UL

		Power (W)	On Time (sec)	Off Time (sec)	Repeated (Counts)
Tissue Exposure Modes [Model: AcuPulse 40 (30)]	Continuous:	1.0 – 4.5 5.0-40(30)	N.A.	N.A.	N.A.
	Single pulse:	1.0 – 4.5 5.0-40(30)	0.05 – 1.00	N.A.	N.A.
	Repeat pulse:	1.0 – 4.5 5.0-40(30)	0.05 – 1.00	0.01 – 1.00	2-10 2-10

SurgiTouch Automated Applications (partial list of total clinical applications)

Automated Specialties and Applications	ENT	Tonsillectomy, LAUP, Bronchoscopy, Stapedectomy, Nasal Surgery, Larynx, Myringotomy
	GYN	Laparoscopy, Colposcopy, Free Hand
	General Surgery	Fine Freehand
	Neurosurgery	Microsurgery, Free Hand
Aesthetics (option)	Skin Resurfacing (SilkTouch, FeatherTouch, Paint Modes), Blepharoplasty	
Feature	<ul style="list-style-type: none"> Variety of user selectable scan shapes, depending on application and accessory User selectable scan pattern sizes from 0.16 mm to 16 mm, depending on application and accessory User selectable depths of incremental tissue vaporization Automatic display of recommended starting parameters for each application and accessory; user can override * Integrated animations demonstrating accessory set up 	

Fiber Technical Specifications

Specifications	2 meter long, 1.04mm outside diameter
Spot Size	295µm at fiber output
Flexible Fiber Delivery Options	FiberLase™ Single-use, sterile, 2 m length, 1.04 mm OD, use with FiberLase accessories MicroLase™ Reusable (25x) non-sterile, use with MicroLase Otology Handpiece Kits



Ensure Compliance with Government Safety and Performance Standards
1-877-LUMENIS (1-877-586-3647)
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PB-1001426USA Rev. B