



We have taken  
CO<sub>2</sub> lasers  
to the limit

- » Highest Energy
- » Optimal Treatments
- » Best Performance

UltraPulse®

ActiveFX™ | DeepFX™ | TotalFX™ | SCAAR FX™





fine lines

blepharoplasty

syringoma

actinic keratosis

deep wrinkles

acne scars

surgical scars

dyschromia

sun damage

“With UltraPulse's SCAAR FX, I am able to treat **deep** skin conditions, like hypertrophic scars, with the results of enhanced skin condition and improved quality of life for patients. SCAAR FX has the unique combination of short pulse durations and high energy which enables deep, precise and effective treatment.”

— *Dr. Matteo Tretti Clementoni, Plastic Surgeon*

“I feel that I can **safely** treat my patients more aggressively with the UltraPulse, something I would not attempt with other CO<sub>2</sub> laser systems”

— *Dr. Girish Munavalli, Dermatologist*

“UltraPulse gives me the extreme **precision** I desire from a fractional CO<sub>2</sub> laser. It gives me the possibility to tailor parameters to individual patient's needs and the confidence to treat in a safe and efficient way.

— *Dr. Christine Dierickx, Dermatologist*

# UltraPulse<sup>®</sup>

much more than a fractional laser

With six times the power of most CO<sub>2</sub> lasers, the UltraPulse system is the preferred laser for advanced applications. Delivering speed, versatility, performance and precision, UltraPulse easily supports a full spectrum of aesthetic and surgical capabilities.

- 6x more powerful than other CO<sub>2</sub> lasers
- 4x the depth of penetration of any other CO<sub>2</sub> laser (up to 4.0 mm)
- 2x the treatment speed of most CO<sub>2</sub> lasers
- 240 Watts of power to tissue
- 225 mJ of energy
- Optimal ablation / coagulation ratio
- Effective single treatment, single pass = > means fast recovery
- Advanced patented technologies
- Offers the most delivery options
- Customizable with unmatched versatility in a range of treatments
- Low cost consumables
- 34 FDA cleared dermatology and plastic surgery indications



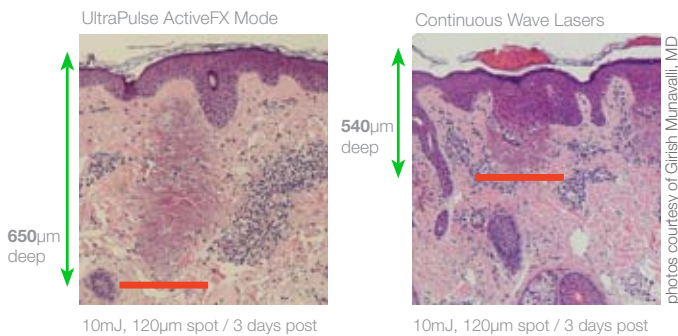
# UltraPulse

The science behind UltraPulse directly relates to the powerful and versatile results you can achieve for your patients. Only UltraPulse's fractional technology delivers the power to precisely ablate tissue at optimum levels for impressive results, more quickly, and with less pain than other CO<sub>2</sub> systems.<sup>1</sup>

## Depth of Impact

A variety of handpieces provide superficial and deeper depths of penetration. Tissue ablation occurs at the precise level which effectively removes surface discoloration, improves skin texture, induces immediate tissue coagulation and stimulates long-term impact on collagen synthesis for improvement of deep wrinkles and scars.<sup>1-11</sup>

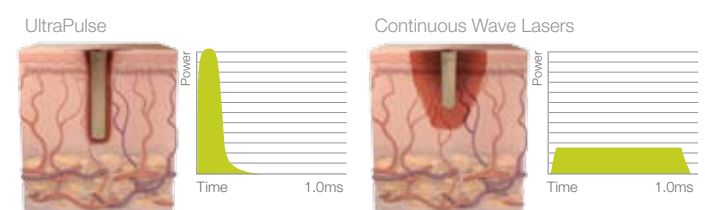
### SUPERIOR COLLAGEN REMODELING



## Ideal Ablation / Coagulation Ratio

Sustainable high pulse power with extremely short-pulse durations ablates tissue instantly to reach effective dermal depths with sufficient coagulation to promote collagen remodeling and avoid unnecessary complications.<sup>2</sup>

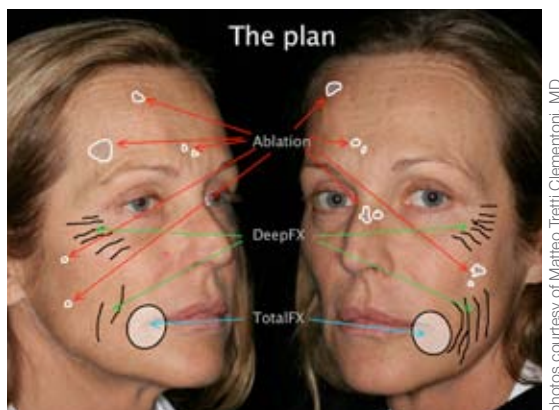
### HIGH PEAK POWER, SHORT PULSE DURATION



## The Most Customizable CO<sub>2</sub> Treatment Available

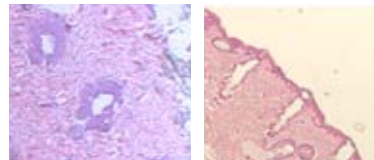
With the highest power to tissue of any CO<sub>2</sub> laser, UltraPulse delivers the shortest pulse width for any given energy. This combination provides the best control of residual thermal damage and the lowest probability of complications.<sup>1-11</sup>

### Personalize a treatment plan for your patients



### CUSTOMIZED COVERAGE

1-100% ablation



histology courtesy of Vladimir Lemberg, PhD

Only UltraPulse gives the flexibility of 1-100% coverage in a single pass.

### CUSTOMIZED DEPTH

.05-4.0 mm



histology courtesy of Vladimir Lemberg, PhD

Target dyschromia, fine lines, deep wrinkles and scars by choosing the depth of ablation.<sup>1-11</sup>

# Introducing SCAAR FX™

## Synergistic Coagulation and Ablation for Advanced Resurfacing

- » Highest Energy (150 mJ per pulse)
- » Deepest Treatment (up to 4.0 mm)
- » Best Performance (optimal ablation/coagulation ratio)

UltraPulse's unique SCAAR FX mode enables treatment of a variety of severe skin lesions which require synergistic coagulation and ablation for advanced resurfacing. Conspicuous, complex and deep skin lesions, such as surgical and acne scars, can be treated like never before with minimal side effects and more effective results.

Treatment of these types of conspicuous scars has been shown to improve patients' quality of life by improving structure and range of motion, as well as the appearance of the skin.

UltraPulse is six times more powerful than other CO<sub>2</sub> lasers. Using precision and higher energy impact (up to 150 mJ per spot), as well as shorter pulse durations, the precision of the UltraPulse CO<sub>2</sub> laser beam allows up to 4.0 mm impact into skin tissue. This is four times deeper than any other CO<sub>2</sub> laser.

Due to these characteristics, SCAAR FX uses a unique ablation/coagulation ratio to substantially improve the structure of deep contracted lesions, such as surgical scars. This maximizes results, minimizes side effects and reduces treatment time.



Photos courtesy of Matteo Tretti Clementoni, M.D., Milan, Italy

## Improved Range of Motion

3 weeks after one treatment (SCAAR FX 150 mJ, density 1%, 2 passes on the pre-sternal area, right anterior axillary pillar, left breast). Patient is now able to raise her arms higher above her head.

BEFORE

AFTER

## Optimal Versatility

	ActiveFX™ Treat fine lines, texture and dyschromia	DeepFX™ Treat wrinkles and scars	TotalFX™ Combine superficial and deep fractional effects	SCAAR FX™ Treat deep, conspicuous and complex lesions
Adjustable Healing Zone Volume				
Spot Size	 1.3 mm	 0.12 mm		 0.12 mm
Depth				
Scanner	ActiveFX (CPG)	DeepFX	ActiveFX (CFG) and DeepFX	DeepFX

# UltraPulse Clinical Results

Only UltraPulse delivers next generation CO<sub>2</sub> laser science which enables remarkable results. With energy on tissue of up to 225 mJ, UltraPulse provides the precision and energy needed to reach deep into the tissue to affect the deepest layers of the dermis, up to 4 mm deep (up to 150 mJ per spot with a single pulse). No other CO<sub>2</sub> laser has this ability. So for the results your patients want and the treatment control you demand, UltraPulse is the unparalleled solution.

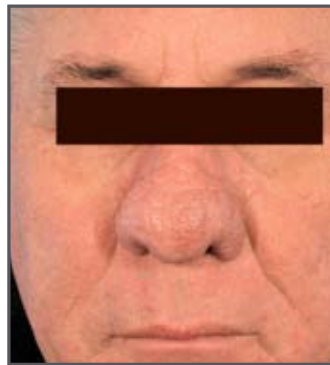


BEFORE

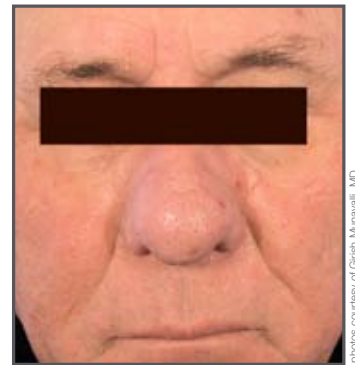


AFTER 1 TREATMENT

photos courtesy of Matteo Tretti Clementoni, MD

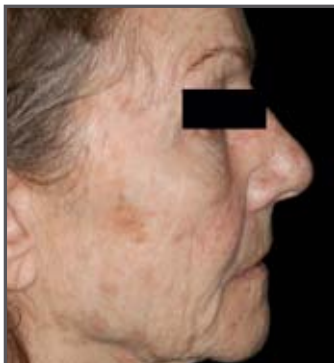


BEFORE



AFTER 1 TREATMENT

photos courtesy of Gresh Maravalli, MD



BEFORE



AFTER 2 YEARS

photos courtesy of Matteo Tretti Clementoni, MD



BEFORE



AFTER

photos courtesy of Dr. Ian Jun, MD



BEFORE



AFTER

photos courtesy of Jill Waibel, MD



BEFORE



AFTER

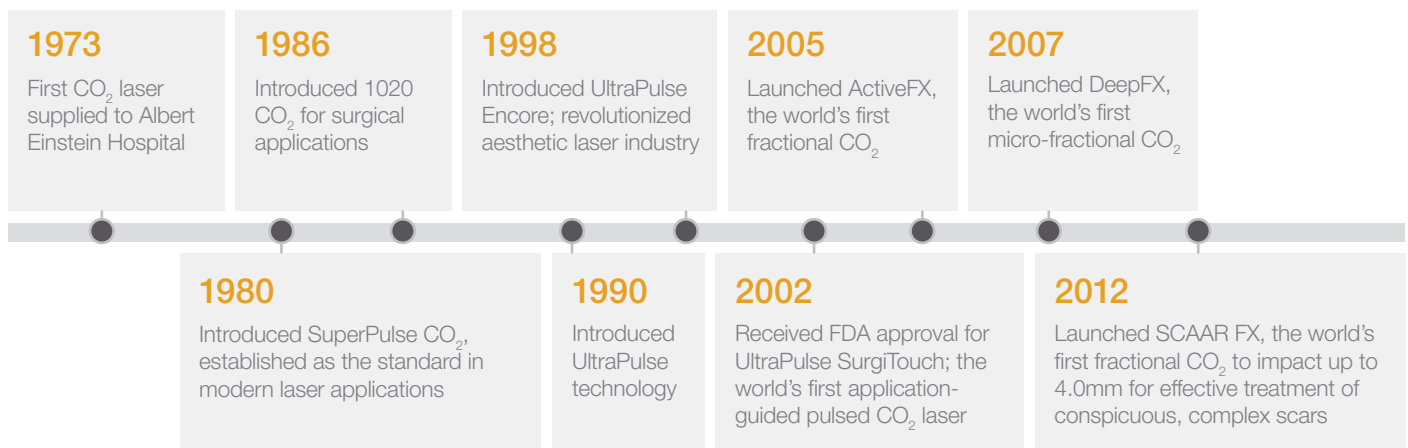
photos courtesy of Jill Waibel, MD

# Carrying the Gold Standard in Lasers

For more than 40 years, Lumenis has been the global leader in research and development, manufacturing and distribution of the world's most advanced laser and intense pulsed light systems. Lumenis holds more than 160 patents on which much of the laser industry is based. With more than 80,000 systems installed in Dermatology, Urology, Ophthalmology and Otolaryngology and Aesthetic physicians' offices worldwide, Lumenis is committed to world class light-based medicine.

Considered the gold standard of CO<sub>2</sub> lasers, UltraPulse has been referenced in over 90 peer reviewed publications. With its long history of fractional capabilities, UltraPulse has lead the way in fractional resurfacing and treatment of conspicuous scars.

## Lumenis CO<sub>2</sub> Milestones



## Support Services

**Clinical / Scientific Training** – Training is provided by practitioners who use Lumenis' systems daily and the training utilizes their deep knowledge of clinical science and real world experience.

**Marketing Support** – Build your practice with a series of customizable advertisements, presentations, education materials, letters and much more.

**Technical Support** – Whether your system is serviced at the factory or by our team of regionally based service engineers, we are committed to keeping your practice running smoothly.

# UltraPulse - Much More Than a Fractional Laser

## Specifications

### Technical Specifications

Wavelength	10,600 nm
Laser Type	UltraPulse or CW
Power to Tissue	240 W
Energy	Up to 225 mJ pulse
Spot Size	min. 0.12 mm / max. 2.0 mm (TrueSpot)
Scan Size	Up to 15 x15 mm
Density per Scan	Fractional mode: 1-82%, Full ablative (non-fractional): >100%
Depth of Penetration	Up to 4.0 mm per pulse (with SCAAR FX)
FDA-cleared Indications	>100
FDA-cleared Aesthetic Indications	34
Full Resurfacing Capabilities	yes
Fractional Capabilities	yes
Incisional Capabilities	yes
Excisional Capabilities	yes
Aiming Beam	5 mW red diode laser, 635 nm, adjustable intensity, blink on/off
Beam Delivery	Articulated arm with up to 240 cm reach, 360° rotation
Memory Setting	Three
Cooling	Self-contained, closed cycle
Warranty and Coverage	1 Year standard
Recommended Passes/Treatment	1

### Platform Specifications

Electrical	100 – 240 VAC, 20 A max., 50/60 Hz
Weight	128 kg (280 lbs)
Dimensions (WxDxH)	34 x 51 x 144 to 195 cm (13.6 x 20 x 57 to 77 in)

### Optional Handpieces



**TrueSpot** collimated handpiece delivers consistent fluence over a range of working distances. Ideal for skin resurfacing, acne scars, actinic keratosis, basal cell carcinoma, burn debridement, scar treatment, rhinophyma and removal of nevus. (Up to 2.0 mm spot size)

**Focused Incisional** handpiece for precise incision and large area ablation, skin resurfacing and precise surgical work including blepharoplasty and wart removal. (0.2 mm and 1.0 mm)

### Handpieces

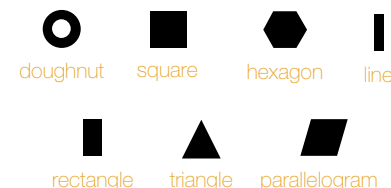


ActiveFX (CPG)



DeepFX handpiece

Optimal reproducibility with a variety of scan shapes, density and sizes:



Contact your Lumenis Sales Representative for more information, or call **1-877-LUMENIS** (1-877-586-3647).

[www.aesthetic.lumenis.com](http://www.aesthetic.lumenis.com)



Ensure Compliance with Government Safety and Performance Standards  
**1-877-LUMENIS (1-877-586-3647)**  
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4/12 ISO 13485:2003 Certified CE:0473 PB-1124760 rev B

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