We have taken CO₂ lasers to the limit

» Highest Energy
» Optimal Treatments
» Best Performance

UltraPulse®
ActiveFX™ | DeepFX™ | TotalFX™ | SCAAR FX™
“UltraPulse gives me the extreme precision I desire from a fractional CO₂ 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

“I feel that I can safely treat my patients more aggressively with the UltraPulse, something I would not attempt with other CO₂ laser systems”

— Dr. Girish Munavalli, Dermatologist

“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
With six times the power of most CO$_2$ 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$_2$ lasers
- 4x the depth of penetration of any other CO$_2$ laser (up to 4.0 mm)
- 2x the treatment speed of most CO$_2$ 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
As Unique as Each Patient

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 CO₂ systems.¹

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.¹⁻¹¹

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.²

The Most Customizable CO₂ Treatment Available

With the highest power to tissue of any CO₂ 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.¹⁻¹¹

Personalize a treatment plan for your patients

10mJ, 120μm spot / 3 days post

UltraPulse ActiveFX Mode

Continuous Wave Lasers

540μm deep

650μm deep

10mJ, 120μm spot / 3 days post

UltraPulse

Continuous Wave Lasers

1.0 ms

1.0 ms

1.0 ms

CUSTOMIZED COVERAGE

1–100% ablation

CUSTOMIZED DEPTH

.05–4.0 mm

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

Target dyschromia, fine lines, deep wrinkles and scars by choosing the depth of ablation.¹⁻¹¹

Histology courtesy of Vladimir Lemberg, PhD

Histology courtesy of Vladimir Lemberg, PhD

Photos courtesy of Matteo Tretti Clementoni, MD

Photos courtesy of Girish Munavalli, MD
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 CO₂ lasers. Using precision and higher energy impact (up to 150 mJ per spot), as well as shorter pulse durations, the precision of the UltraPulse CO₂ laser beam allows up to 4.0 mm impact into skin tissue. This is four times deeper than any other CO₂ 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.

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.

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

Optimal Versatility

<table>
<thead>
<tr>
<th>ActiveFX*</th>
<th>DeepFX*</th>
<th>TotalFX™</th>
<th>SCAAR FX™</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treat fine lines, texture and dyschromia</td>
<td>Treat wrinkles and scars</td>
<td>Combine superficial and deep fractional effects</td>
<td>Treat deep, conspicuous and complex lesions</td>
</tr>
<tr>
<td>Adjustable Healing Zone Volume</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spot Size</td>
<td>1.3 mm</td>
<td>0.12 mm</td>
<td>0.12 mm</td>
</tr>
<tr>
<td>Depth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scanner</td>
<td>ActiveFX (CPG)</td>
<td>DeepFX</td>
<td>ActiveFX (CFG) and DeepFX</td>
</tr>
</tbody>
</table>
Only UltraPulse delivers next generation CO₂ 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 CO₂ laser has this ability. So for the results your patients want and the treatment control you demand, UltraPulse is the unparalleled solution.
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 CO₂ 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 CO₂ Milestones

1973
First CO₂ laser supplied to Albert Einstein Hospital

1980
Introduced SuperPulse CO₂, established as the standard in modern laser applications

1986
Introduced 1020 CO₂ for surgical applications

1990
Introduced UltraPulse Encore; revolutionized aesthetic laser industry

1998
Introduced UltraPulse technology

2002
Received FDA approval for UltraPulse SurgiTouch; the world’s first application-guided pulsed CO₂ laser

2005
Launched ActiveFX, the world’s first fractional CO₂

2007
Launched DeepFX, the world’s first micro-fractional CO₂

2012
Launched SCAAR FX, the world’s first fractional CO₂ to impact up to 4.0mm for effective treatment of conspicuous, complex scars

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength</td>
<td>10,600 nm</td>
</tr>
<tr>
<td>Laser Type</td>
<td>UltraPulse or CW</td>
</tr>
<tr>
<td>Power to Tissue</td>
<td>240 W</td>
</tr>
<tr>
<td>Energy</td>
<td>Up to 225 mJ pulse</td>
</tr>
<tr>
<td>Spot Size</td>
<td>min. 0.12 mm / max. 2.0 mm (TrueSpot)</td>
</tr>
<tr>
<td>Scan Size</td>
<td>Up to 1.15 mm</td>
</tr>
<tr>
<td>Density per Scan</td>
<td>Fractional: 1–82%, Full ablative (non-fractional): &gt;100%</td>
</tr>
<tr>
<td>Depth of Penetration</td>
<td>Up to 4.0 mm per pulse (with SCAAR FX)</td>
</tr>
<tr>
<td>FDA-cleared Indications</td>
<td>&gt;100</td>
</tr>
<tr>
<td>FDA-cleared Aesthetic Indications</td>
<td>34</td>
</tr>
<tr>
<td>Full Resurfacing Capabilities</td>
<td>yes</td>
</tr>
<tr>
<td>Fractional Capabilities</td>
<td>yes</td>
</tr>
<tr>
<td>Incisional Capabilities</td>
<td>yes</td>
</tr>
<tr>
<td>Excisional Capabilities</td>
<td>yes</td>
</tr>
<tr>
<td>Aiming Beam</td>
<td>5 mW red diode laser, 635 nm, adjustable intensity, blink on/off</td>
</tr>
<tr>
<td>Beam Delivery</td>
<td>Articulated arm with up to 240 cm reach, 360° rotation</td>
</tr>
<tr>
<td>Memory Setting</td>
<td>Three</td>
</tr>
<tr>
<td>Cooling</td>
<td>Self-contained, closed cycle</td>
</tr>
<tr>
<td>Warranty and Coverage</td>
<td>1 Year standard</td>
</tr>
<tr>
<td>Recommended Passes/Treatment</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Platform Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical</td>
<td>100 – 240 VAC, 20 A max., 50/60 Hz</td>
</tr>
<tr>
<td>Weight</td>
<td>128 kg (280 lbs)</td>
</tr>
<tr>
<td>Dimensions (WxDxH)</td>
<td>34 x 51 x 144 to 195 cm (13.6 x 20 x 57 to 77 in)</td>
</tr>
</tbody>
</table>

#### Handpieces

<table>
<thead>
<tr>
<th>Handpiece</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TrueSpot collimated handpiece</td>
<td>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)</td>
</tr>
<tr>
<td>Focused Incisional handpiece</td>
<td>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)</td>
</tr>
</tbody>
</table>

#### Optimal Reproducibility

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

- doughnut
- square
- hexagon
- line
- rectangle
- triangle
- parallelogram

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

www.aesthetic.lumenis.com