AcuPulse™ Fractional CO₂ Laser

Technical Specifications

- **AcuPulse Models**: AcuPulse 40 AES-R, AES-F, AES-A
- **Wavelength**: 10.600 nm
- **Laser Type**: CO₂ laser, sealed-off, DC excited
- **Laser Operating Modes**: SuperPulse, Continuous Wave (CW), Pulser
- **Maximum Peak Power on Tissue**: 200 W
- **Average Power**: 40 W
- **Spot Size**: 120 µm
- **Percent Coverage per Pass**: 5-25%
- **Depth of Penetration**: Up to 1000 µm per pulse
- **FDA-cleared Indications**: >100
- **FDA-cleared Aesthetic Indications**: 34
- **Full Resurfacing Capabilities**: Yes
- **Fractional Capabilities**: Yes
- **Excisional Capabilities**: Yes
- **Aiming Beam**: 5 mW red diode laser, 635 nm, adjustable intensity, blink on/off
- **Beam Delivery**: Lightweight, carbon fiber, 7-pin, spring-balanced arm, 120 cm (47.2") reach, 360 deg. rotation
- **Memory Setting**: Min. 100
- **Cooling**: Self-contained, closed cycle
- **Electrical**: 100-240 VAC, 10A (Max), 50/60 Hz
- **Dimensions**: 37 cm W x 40 cm D x 119 cm H; (14.6" W x 15.8" D x 47" H)
- **Weight**: 49 kg (108 lbs)
- **Standards**: CE, UL
- **Warranty and Coverage**: 1 year standard

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The AcuPulse Fractional CO₂ Laser is the only laser to offer both SuperPulse technology, along with CW, for a range of aesthetic applications. By generating the same energy in a fraction of the time compared to a continuous-wave laser, SuperPulse ablates target tissues quickly, while controlling the amount of lateral thermal damage. So you can reduce patient downtime and discomfort while delivering optimal results. The AcuPulse system also happens to be well within reach.

Want to know more? This is it.

Innovating from the industry leader

Just what you’d expect from the innovators of UltraPulse®. The AcuPulse system is the smart choice among fractional CO₂ lasers. It goes beyond basic continuous-wave (CW) benefits to bring you the added value of high-peak power, short-pulse duration SuperPulse technology. Unsurpassed education, customer service and product support make it the ultimate Lumenis experience at a price that’s commensurate with your current needs.

Introducing the high-peak power, short-pulse duration AcuPulse™ Fractional CO₂ Laser

Super versatile & precise

Beam scan variety. Five shapes. Nine sizes. Five density settings. All for more than 100 FDA-cleared indications. Variable depth control and scanning precision for optimal reproducibility.

Beam scan shapes

- Doughnut
- Square
- Hexagon
- Rectangle
- Line

Super sleek & sophisticated


Super simple & state-of-the-art

Touchscreen, color GUI controls. Switch modes with the push of a button. Integrated instruction tools and video tutorials demonstrating accessory assembly. Superior electronic control systems offering unmatched safety features and reproducibility.

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the power of the pulse

Standard CW lasers have long-pulse durations due to their constant low-power profile. These long-pulse durations cause heat conduction in the tissue resulting in wide, inconsistent, conical-shaped zones of thermal damage. While CW lasers allow for maximum tissue involvement, they offer the least amount of consistency and patient comfort.

AcuPulse, a more advanced SuperPulse laser, has high-peak power with short-pulse durations, providing more consistent heating within the thermal zone. The ablation threshold is achieved very quickly and target tissue is ablated with limited thermal damage, providing increased patient comfort and less downtime.

The premium UltraPulse laser provides sustainable high-pulse power, delivering six times more power than most CW lasers. Through extremely short-pulse durations, UltraPulse ablates tissue very quickly, leaving a narrow, controlled amount of thermal damage. With 240 watts of average pulse power to tissue, the UltraPulse can ablate deeper than CW or SuperPulse lasers for indications such as burn scars, while imposing minimal additional thermal damage.

### IMPACT OF PULSE WIDTH ON TREATMENT OUTCOMES

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As pulse widths increase, thermal zones, discomfort and downtime increase.

Illustration of potential patient discomfort based on pulse width.


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AcuPulse delivers:

- Adjustable zones of thermal damage
- Pulse durations in less than half a millisecond
- Raster scan for precise pulse delivery and reliable consistency
- Decreased downtime and discomfort for your patients
- A legacy of experience in developing CO₂ technology
- Unparalleled Lumenis customer service and support

The AcuScan120™ offers:

SuperPulsed Digital Scanning that is precise, fast, repeatable and safe. Deep fractional 120 µm spot with state-of-the-art mirror position feedback. Open visualization allows you to place the treatment exactly where you want it.

coming soon!

A large spot superficial fractional hand piece.

Incisional and resurfacing hand pieces available.

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