

# NEW

PicoWay®   
**Resolve**™  
Picosecond Holographic Fractional

  
**PicoWay**®  
The Clear Picosecond Laser Solution



SYNERON  CANDELA®

“I believe, the ultra-short PicoWay technology requires lower energies and yields faster clinical results than traditional Q-switched lasers. In my experience, the Nd:YAG wavelength can treat a wide variety of skin types and, with the reduced energy, minimizes thermal injury to the skin. I believe that the PicoWay will further revolutionize tattoo removal.”

Tina Alster, M.D., Director, Washington Institute of Dermatologic Laser Surgery, Clinical Professor of Dermatology, Georgetown University Hospital

## PicoWay – The Clear Solution with Breakthrough Technology

PicoWay is a remarkably innovative dual wavelength picosecond laser with both non-fractional & fractional capabilities from Syneron Candela, the most trusted name in aesthetic lasers.

PicoWay's unique mode of action is based on delivering ultra-short picosecond pulses of energy to the tissue. These bursts of energy create a photoacoustic impact which breaks up the pigmentation into smaller, more easily eliminated particles.

### Have it both ways

532 nm & 1064 nm non-fractional & fractional picosecond laser

### NEW Resolve™ dual wavelength picosecond fractional module

Resolve for pigmentation, skin rejuvenation and toning

### With the non-fractional modality, treat a wide range of tattoos

2 wavelengths to treat all tattoo<sup>1</sup> colors & types, including recalcitrant tattoos

### High peak power

Delivers energy over a broad range of spot sizes

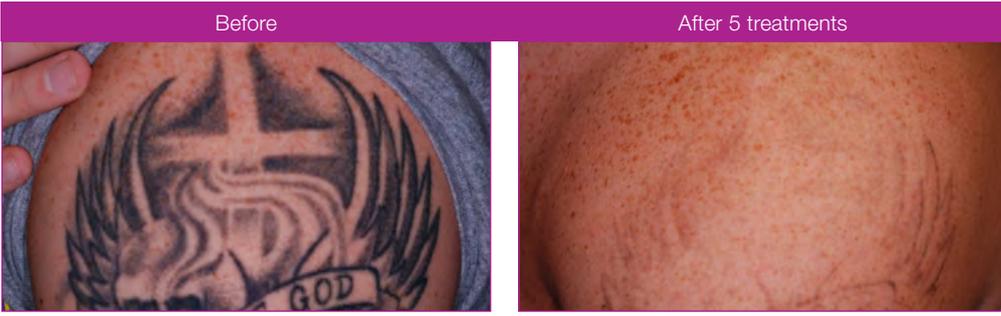
### Short picosecond pulses

Allows energy delivery with minimal risk of side effects



# Pigmented Lesions | Tattoos | Skin Rejuvenation

Tattoo



Photos: Eric Bernstein, MD

Tattoo



Photos: Eric Bernstein, MD

Tattoo



Photos: Eric Bernstein, MD

Skin Rejuvenation



Photos: David Friedman, M.D.

Pigmented Lesions



Photos: Henry Chan, MD

# World's 1<sup>st</sup> Dual Wavelength Picosecond Laser Now With Dual Wavelength Fractional Capabilities

Proprietary PicoWay technology has optimal flexibility to adjust wavelength (1064nm & 532nm), beam delivery, energy, spot size and repetition rate for completely customizable treatments.

## Exemplary performance

Integrated in a proven, reliable Candela platform.

## Optimal flexibility for optimal results

Adjust wavelength, energy, spot size and repetition rate to treat all skin types.

## Scalable

Robust design enables future application developments.

## Ergonomic handpieces

Featherweight handpieces and articulated arm mean improved user comfort over large treatment areas and long treatment days.

## Large spot sizes

Customize treatments with a broad range of spot sizes. Large spot sizes for faster coverage and the depth of penetration needed for some targets.

## Linked user interface

Dial it on the handpieces, see it on the screen.

## Easy to use

Streamlined guided mode user interface virtually eliminates a learning curve.

## Fits any office environment

Medium sized, mobile from room to room.

## Fast initiation time

Ready to use in less than 2 minutes.

## Low running costs

PicoWay Pulse-on-Demand ensures ultra-long flashlamp life.



Now with both non-fractional & fractional capabilities.  
Dual wavelengths: 532nm & 1064nm.



# Revolutionary Dual Wavelength Picosecond Fractional: 532nm & 1064nm

**Appealing:** A new way to treat your patients

**Versatile:** Treat skin rejuvenation, pigmentation and toning

**Revolutionary:** 1<sup>st</sup> laser with holographic fractional technology

**Predictable & Consistent:** Holographic technology ensures reproducible results

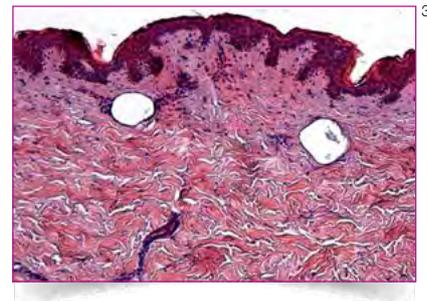
## Easy upgrade to PicoWay.



PicoWay - now with Resolve - is the first picosecond dual wavelength (532nm & 1064nm) system with both non-fractional and fractional capabilities. "Picosecond lasers are already being used for skin rejuvenation and improvement of acne scarring, using fractionated and non-fractionated beam profiles"<sup>1,2</sup>.

### Resolve Creates Skin Rejuvenation via LIOBs

Resolve uses picosecond pulses to create laser induced optical breakdown (LIOBs) in the dermis while leaving the epidermis intact. The LIOBs cause lesions in the dermis due to plasma formation. This LIOB creation stimulates a healing response and skin remodeling which results in skin rejuvenation.



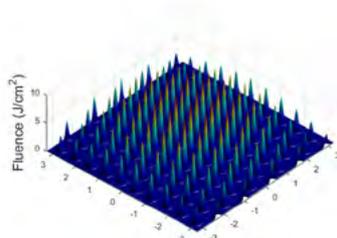
### Resolve 532nm for shallower lesions



### Resolve 1064nm for deeper lesions



Competitor's Micro-lens Array Fractional Technology <sup>4</sup>

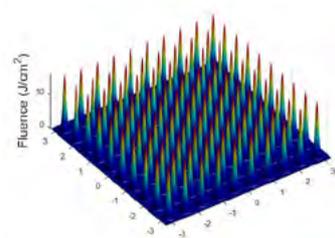


**Gaussian Profile**

The peaks do not have the same energy. Peak Fluence Range: 2.6 to 11.3 J/cm<sup>2</sup>. 30% of energy is lost as background energy.

**Total energy = 0.2 J / treatment area**

PicoWay Resolve Holographic Fractional Technology



**Top Hat Profile**

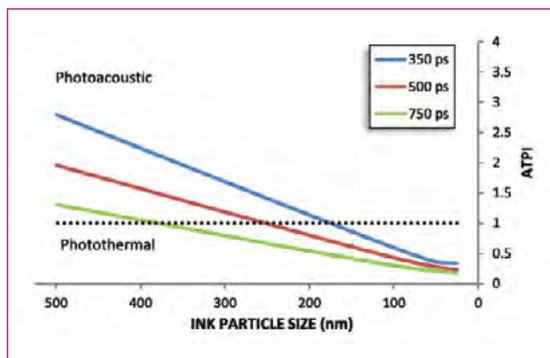
All peaks have the same energy. Peak Fluence: 16.8 J/cm<sup>2</sup> for all peaks. No energy is lost as background energy.

**Total energy = 0.4 J / treatment area**

# The Science of PicoWay Technology - Experience Picosecond Laser Leadership

## Short Pulses & High Peak Power for Optimal Results

PicoWay's unique, proprietary mode of action has high peak power and short pulse durations for demonstrated performance and comfort. PicoWay's ultra-short pulses enable the strong photoacoustic impact needed to fracture pigment particles using lower fluences, for clearance in fewer treatments.

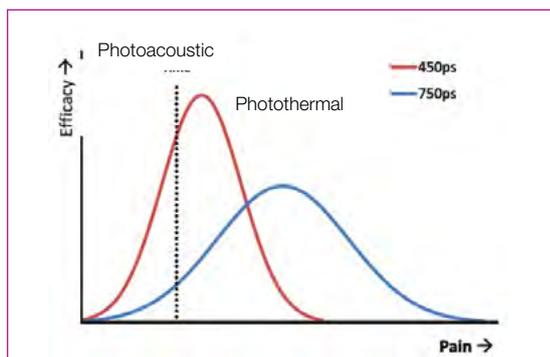


### Acoustic to Thermal Pressure Index.

An ATPI index greater than 1 indicates a photoacoustic fracturing mechanism while an index less than 1 indicates a photothermal fracturing mechanism. PicoWay has 450 ps & 375 ps pulses.

### Photoacoustic Fracturing is Advantageous

1. Less heat is generated resulting in fewer side effects and minimal discomfort
2. Improved ability to treat smaller particles resulting in more complete clearance.



### High Peak Power Means Greater Efficacy

The high peak power of the 450 ps pulse of PicoWay delivers 4.5 times more photoacoustic effect than the 750 ps pulse of other picosecond devices. The 750 ps pulse delivers a more photothermal effect, since it does not have high peak power and must deliver the energy over a longer period of time. This excess photothermal effect can lead to potential side effects.\*



### Photoacoustic

Laser energy is delivered so rapidly that the even the smallest pigment fragments will shatter.



### Photothermal

Laser energy is delivered more slowly so that only larger pigment fragments will shatter.

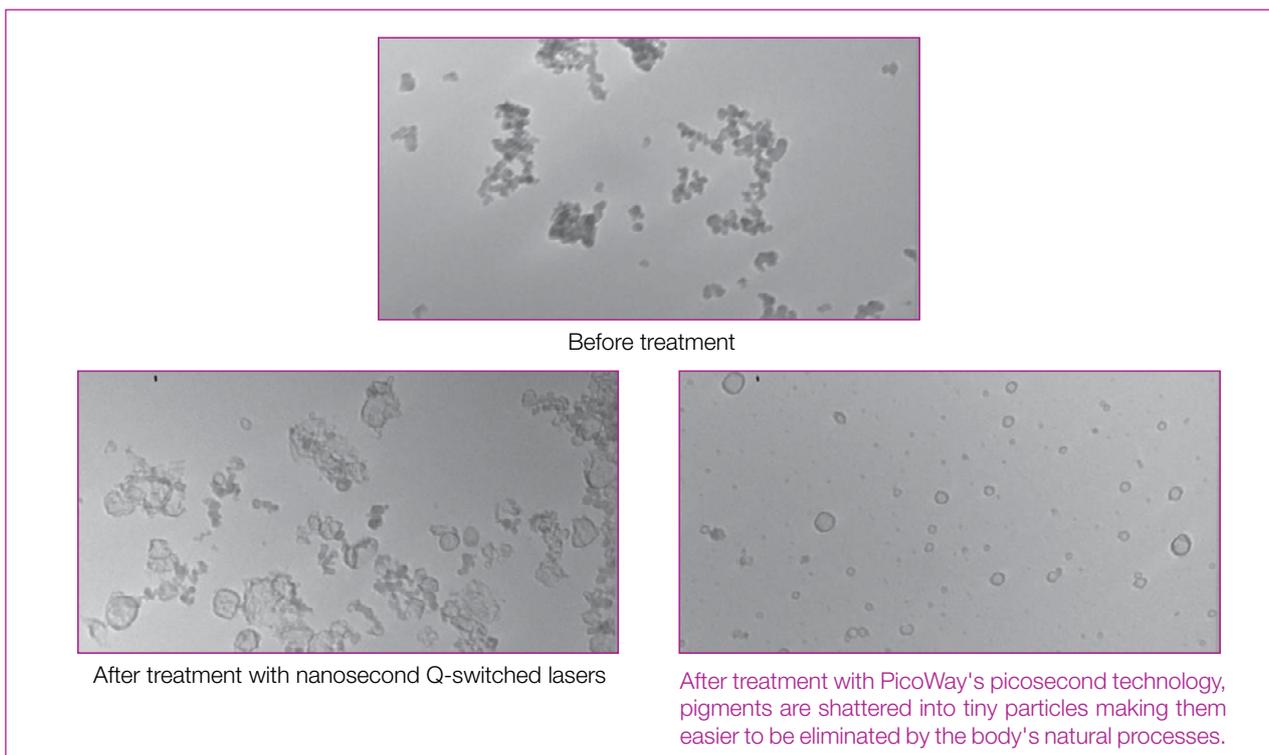
\* Unpublished data on file

# Why choose PicoWay Technology rather than Q-Switch?

Scientists acknowledge that the shorter the pulse duration, the higher the efficiency for converting laser energy into the mechanical stress needed to fracture particles into small fragments. The smaller the fragment, the easier it is for the body to effectively remove it.

**Q-Switch technology** requires numerous treatment sessions, causes significant discomfort during treatment and, in many cases, incompletely removes tattoos<sup>\*\*</sup> and pigmented lesions.

**Picosecond technology**, has ultra-short pulse durations, 100 times shorter than Q-switch lasers, and in the trillionths of a second. PicoWay is the answer physicians are looking for to combat the reluctance patients may have to treat tattoos or pigmented lesions.



<sup>\*\*</sup>As reported in scientific literature

“PicoWay’s unique picosecond technology enables full flexibility to adjust the wavelength, energy, spot size and repetition rate, providing customizable treatments which ensure outstanding clinical results, including **high comfort and satisfaction rate**. The novel PicoWay technology also enables our clinic to offer a new and exciting solution to remove pigmented lesions.”

Henry Chan, MD, Vice President of Hong Kong College of Dermatologists, Honorary Professor, Department of Medicine, University of Hong Kong

# PicoWay - The Clear Solution for Pigmented Lesions, Skin Rejuvenation and Tattoo Removal

## PicoWay Specifications

Laser Type	Nd:YAG	Frequency Doubled Nd:YAG
<b>Wavelengths</b>	1064 nm	532 nm
<b>Maximum Energy</b>	400 mJ	200 mJ
<b>Pulse Duration</b>	450 ps	375 ps
<b>Peak Power</b>	0.90 Gigawatts	0.53 Gigawatts
<b>Spot Sizes</b>	2, 3, 4, 5, 6, 7, 8, 9, 10 mm	
<b>Repetition Rate</b>	Single 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 Hz	
<b>Delivery System</b>	Articulated arm with Zoom handpiece	
<b>Warm Up Time</b>	2 minutes	
<b>User Interface</b>	Touchscreen with GUI	
<b>Size</b>	42" H x 18" W x 27" D 107 cm H x 46 cm W x 69 cm D	
<b>Weight</b>	275 lbs. / 125 kg.	
<b>Power Requirements</b>	200-240 VAC, 50/60 Hz, 30 A, 4600 VA single	

## Resolve Specifications

Laser Type	Nd:YAG	Frequency Doubled Nd:YAG
<b>Wavelength</b>	1064 nm	532 nm
<b>Micro-beam energy</b>	Up to 3.0 mJ	Up to 0.30 mJ
<b>Pulse Duration</b>	450 ps	375 ps
<b>Spot Size</b>	6mm x 6mm	6mm x 6mm
<b>Matrix</b>	10 x 10 Micro-beam array	10x10 Micro-beam array
<b>Repetition Rate</b>	Single, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 Hz	
<b>Delivery System</b>	Articulated arm with Resolve handpiece	

Syneron Candela is the global leader in the aesthetic medical device marketplace.

We are one company with two distinctive brands. We combine a level of innovation, expertise and customer understanding that is superior to that of any company in our industry.

Financial stability, through our aligned resources, allows our company to offer customers the broadest available product portfolio, the best global service organization and an expansive worldwide distribution network.

Together, we are more market responsive than ever before. We know how to quickly innovate safe and effective products to meet a variety of needs and price points. We are even stronger at anticipating future market trends to help support our customers and their patients. With new breakthrough technologies currently in the pipeline, we are ideally positioned to maintain our global leadership and continue to help you grow your practice.

Syneron and Candela have offices and distributors around the world.

SYNERON  CANDELA®  
www.syneron-candela.com

<sup>1</sup> A Novel Dual-Wavelength, Nd:YAG, Picosecond-Domain Laser Safely and Effectively Removes Multicolor Tattoos, Eric F. Bernstein, et.al. Lasers in Surgery and Medicine, 2015 Wiley Periodicals, Inc. p1-7

<sup>2</sup> Weiss M, Weiss M, Lorden F, Trageser M, Beasley K. Picosecond laser for reduction of wrinkles: long term results.

<sup>3</sup> Minimally invasive non-thermal laser technology using laser-induced optical breakdown for skin rejuvenation, Louis Habbema et.al, Journal of Biophotonics 5, No. 2, 194-199 (2012)

<sup>4</sup> Based on the competitors' published data