

PicoLO

NEW EXPERIENCE OF GENUINE
PICOSECOND LASER



HIGH STABILITY

GENUINE PICOSECOND

VERSATILITY

FASTER



PicoLO

Brings you the most powerful and stable genuine picosecond that you've never experienced

PicoLO is a next generation, truly picosecond Nd:YAG laser (1064nm & 532nm) designed to treat pigmentation lesions and perform tattoo removal, scar correction and skin rejuvenation.

This ultra short pulse targets pigmentations more effectively, minimizing discomfort, pain, side effects and downtime. PicoLO provides the largest spot size to allow faster treatments.



High
Stability

Genuine
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Versatility

Faster



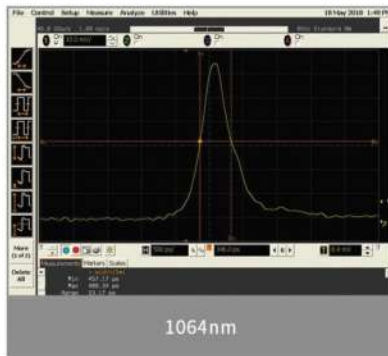
Output Energy Stability <math>< 2\%</math>



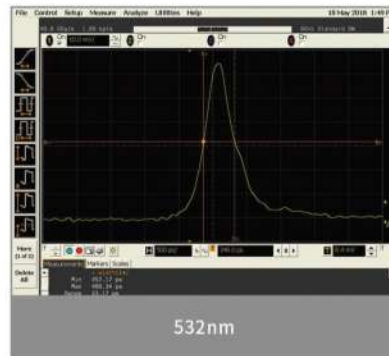
Pulse Duration Stability $\pm 5\%$

High Stability for Optimal Results

Stability is a key factor to maintain peak power to deliver optimal results with picosecond lasers. LASEROPTEK provides the highest stability in both output energy and pulse duration at 1064nm and 532nm wavelengths. This high stability can be maintained throughout using PicoLO and help to induce LIOB even at low fluence, which makes PicoLO differentiated from all others.



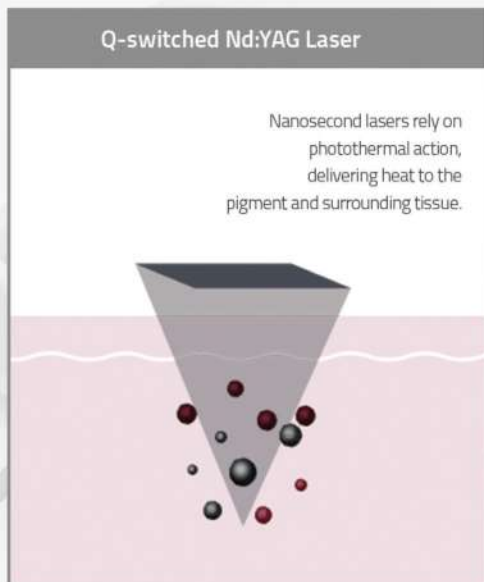
Mean: 469.85ps
Min: 457.17ps
Max: 480.34ps
Range: 23.17ps
Std Dev: 11.74ps (2.5%)



Mean: 404.47ps
Min: 403.41ps
Max: 405.52ps
Range: 2.11ps
Std Dev: 1.49ps (0.3%)

*measured by oscilloscope

Unless the laser produces picosecond or stability of output energy and pulse duration is maintained, the effect of real picosecond laser will not occur and it is no longer picosecond laser. LASEROPTEK guarantees outstanding performance in stability.



Vs



Photomechanical Effect by DOE Fractional Laser Beam

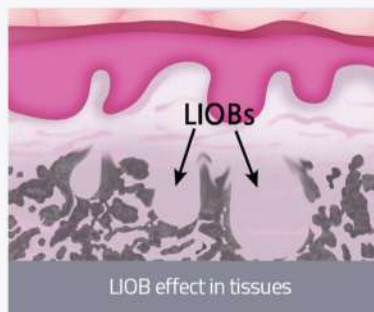
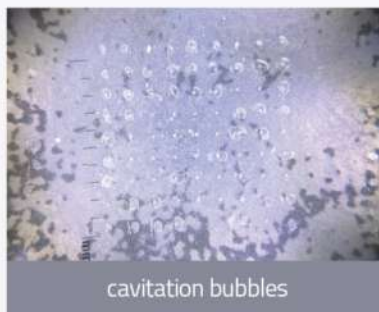
LASEROPTEK's patented DOE Fractional Technology[®] has once again been implemented to provide the photomechanical effect, which is the mechanism by which the chromophores of lesions are fragmented and broken up following the application of short pulsed laser that can quickly heat up the targeted chromophores, which is called thermal stress, as well as acoustic stress being achieved when laser pulse duration is less than the acoustic diffusion time.

In addition, it makes collapse of the cavitation bubble to generate strong local mechanical forces within the dermis, so called as Laser Induced Optical Breakdown (LIOB).

References: Friedman, D. (2015). A New Picosecond Paradigm for Prevention of Tattoo and Pigmented Lesion Removal Induced Adverse Sequelae, Schomacker, K., & Bhawalkar, J. D. (2015). Mechanisms of Action of Fractionated 532nm and 1064nm Picosecond Laser for Skin Rejuvenation

[®]Patent No. 1010426870000(KR), fractional laser system using of diffraction pattern, and thereof ray method

PicoLO's DOE Fractional Laser Beam can safely generate optical breakdown in tissue, leading to an enhanced inflammatory healing process resulting in production of collagen and elastin.



Collapse of cavitation bubbles generates LIOB effect in tissues



The DOE fractional beam can make every spot have the same fluence and penetration depth, enabling heat dissipated through intact skin.

LIOB micro-subcision induces dermal remodeling

Can be adjusted to have no or very short downtime

Very low risk of PIH

PicoLO *User-friendly design offers convenient operating and maximizes the satisfaction of clinicians*



Faster Treatment

The largest spot size among other picosecond lasers enables you to treat more patients faster

Compact Size

Only half the size of other picosecond lasers guarantees you outstanding space utilization

Simple & Easy Hand Pieces

Zoom (2-7mm), fractional (10x10, 7x7mm²) and collimated (20x20mm²) are recognized automatically when connected

Rotatable Monitor

Rotatable design provides convenient operating

SUPER Stability

PicoLO's high stability in energy and pulse duration enables to experience the genuine picosecond

Built-in Hand piece compartment



Faster Treatment

PicoLO's the largest spot size, ranging from 2mm to 20mm, on the market allows you to deliver much faster treatments with less treatment sessions.

For All Skin Types and Various Skin Conditions

PicoLO combines two effective wavelengths and ultra-short pulses to work for all skin types and can be conveniently utilized in treating any types of tattoo, pigmentations, scars, and skin rejuvenations with low or no downtime.



Tattoo Removal - After 2 sessions



Melasma / Lentigo - After 5 sessions



Skin Tightening / Skin Texture - After 1 session



Scar & PIH - After 1 session



Acne Scar - After 4 sessions



Melanochia - After 5 sessions

SYSTEM SPECIFICATIONS

Laser type	Nd:YAG
Wavelength	1064nm/532nm
Pulse duration	450ps/380ps
Pulse Energy (max)	500mj/350mj
Repetition rates	M1, M3, M5, 1~10Hz
Peak Power	1.1GW
Spot size	Zoom: 2 - 7mm Fractional: 10 x 10/7 x 7mm ² Collimated: 20 x 20mm ²
Display	10.4" TFT LCD Touch panel
Electrical control	ARM processor
Cooling system	Closed cycle water to air heat exchanger
Electrical Power	220-230VAC, 50/60Hz
Dimensions	372(W) x 1034(D) x 903(H)
Weight(kg)	110kg

