PICO

HELIOS 785

Empowering PICO with NANO

- Skin Brightening & Toning
- Benign Pigmented Lesions
- Skin Rejuvenation
- Tattoo Removal

LASEROPTEK®

Transforming Technology to Enrich Your Life

PARADIGM SHIFT

PICO
785nm

NANO
1064nm

NANO
532nm

PICO
HELIOS785

Revolutionary 785nm Picosecond

wavelength complements the Nanosecond 1064nm and 532nm capabilities of the HELIOS series for the ultimate solution.

Redefining The
Industry Standard

Key Benefits

- PICO Meets NANO
- 3 Wavelengths in 1 Platform
- High 785nm Pico Energy and Peak Power
- Highly Stable Output Energy and Pulse Duration
- Ultimate Solution for Treating Benign Pigmented Lesions and Skin Brightening
- Safer Treatment & Faster Result

Having established durable stability as one of its core foundations, the HELIOS 785 PICO's uniform beam profile can be safely used for extended periods of time without distortion or loss of maximum output energy.

Additionally, this stable and flat-top beam, emitted across various spot size ranges, wavelengths, pulse durations, and energy settings, significantly reduces side effects such as hyper and hypopigmentation, enabling users to deliver optimal treatment scenarios and satisfaction in their patients.

Why
785nm Pico?

Arduous testing was conducted between 700nm-1000nm when selecting the picosecond wavelength for this series.

The 785nm picosecond wavelength fills the medium of the 1064nm and 532nm wavelengths, enabling more effective treatments of benign pigmented lesions and tattoo removals, while also being effective for skin brightening and toning.

Higher Output Energy & Peak Power

Wide Range of Tattoo Inks

Safer for Darker Skin

Optimized for Pigmented Lesions

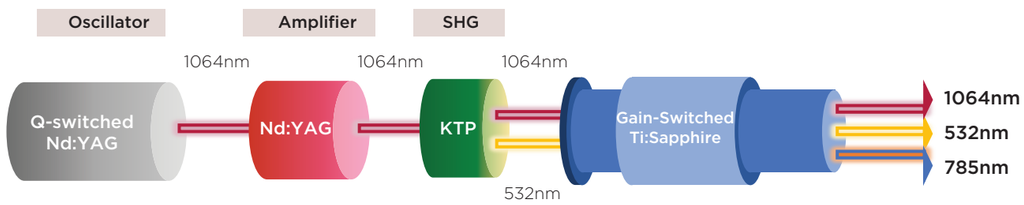
Unique Design of
Laser Resonator

The HELIOS 785 PICO's merges **Pico and Nano** technologies into **3 wavelengths** and **1 system** for the ultimate treatment experience.

The HELIOS 785 PICO's unique design of a solid-state laser resonator enables 1064nm and 532nm nanosecond pulses and 785nm true picosecond pulses to coexist in one platform.

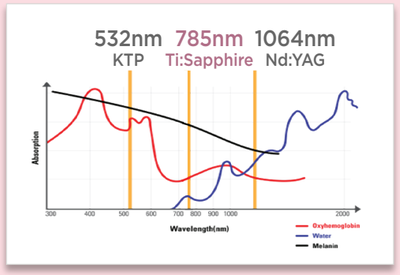
The resonator yields a uniform beam quality and high output energy stability across all three wavelengths, and additionally, the advanced micro cavity design is the catalyst which allows high power levels in the 785nm wavelength.

Simplified Laser Resonator Scheme



785nm on Melanin Absorption Curve

Melanin absorption curve shows the efficacy, penetration, and absorption rate at 785nm indicating it is safer for Fitzpatrick Skin Types III-IV.



Laser –Tissue Absorption Spectrum

Thermally Induced Lens & Birefringence

Due to LASEROPTEK's proprietary optimal design of the laser resonator, thermally induced lens and birefringence is compensated, in result maintaining a uniform beam quality and highly stable output energy in a consistent manner.

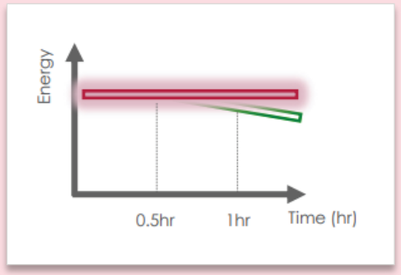


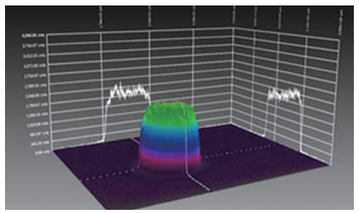
Figure shows energy over time where the Thermal Induced Lens & Birefringence is adapted

Another Reveal On
Another Level

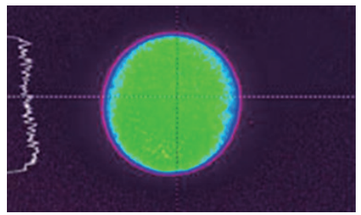
The HELIOS 785 PICO adopts the latest technology to break through industry standards in performance, reliability, innovation, and treatment results.

Advanced Beam Profile Technology

HELIOS 785 PICO adopted the most advanced beam profile technology, providing the uniform beam pattern.



Stable Beam Pattern

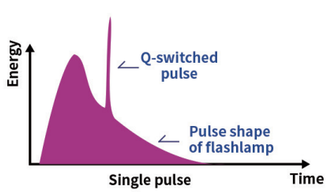


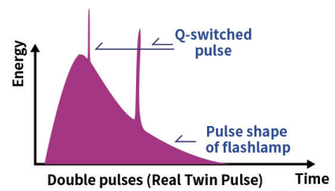
Flat-top Beam Profile

Multiple Laser Modes

Combining 3 complementary wavelengths and 5 different laser modalities, the HELIOS 785 PICO is capable of performing a wide range of applications in aesthetics and covers the complete absorption spectrum of melanin.

Pico 785, 1064, 532, RTP 1064
(Real Twin Pulse) & FR (Free Running) Modes





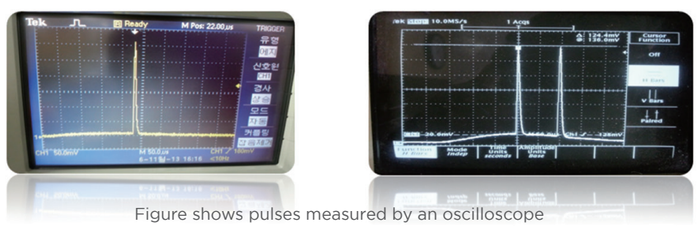
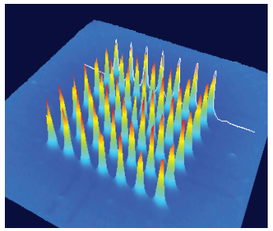
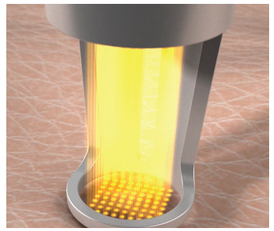


Figure shows pulses measured by an oscilloscope

Patented DOE Fractional Beam Technology

Designed to split a single beam into a predefined number of beams while maintaining spectacular and uniform beam-intensity, beam-profile, stability, power, and penetration depth. The split beams evenly penetrate the deep dermis while protecting the epidermal skin layer to successfully achieve safe and effective treatments.

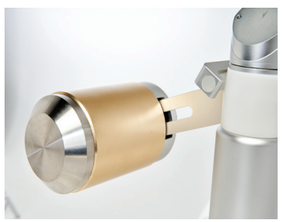




49 microbeams/cm^2 of Dia FX 785 DOE Beam Profile

Crafted To Perfection

The newly upgraded and developed HELIOS 785 PICO has been designed to make a statement. While maintaining the high stability and performance of the HELIOS Series, elements of luxury, class, and convenience were incorporated in the design to build a device perfect in both technology and aesthetics. Complemented with a splash of gold, the HELIOS 785 PICO's interface and a wide array of handpiece colors distinctly challenge industry standards.



Wide Variety of **Handpieces**

785 Zoom
1 x 1 – 7 x 7 mm^2

Zoom Collimator
5 - 10 mm

Zoom
1 – 7 mm

785 Collimator
7 x 7 mm^2

1064 FX
5 x 5 mm^2

Dia FX 785
5 x 5 mm^2

532 FX*
4 x 4 mm^2

*Handpieces options may vary based on region and regulations

Clinical **Results**

Melasma, Light Pigments & Skin Toning

Before | After

Skin Whitening & Rejuvenation

Before | After

Lentigo

Before | After

Tattoo Removal

Before | After

Photos courtesy of Seok Bae Seo, MD, SAS Dermatologic Clinic, Korea

HELIOS 785 PICO Specifications

	Nanosecond		Picosecond
Wavelength (nm)	1064	532	785
Max Pulse Energy (mJ)	Up to 1400 RTP Mode: Up to 2000	Up to 500	Up to 200
	FR Mode: Up to 3000		
Max Pulse Duration	Up to 10 ns FR Mode: Up to 300 μs		600 ps
Repetition Rate (Hz)	1 – 10		
Spot Size (mm)	Φ1 – 10, 1 x 1 – 7 x 7		
Display	10.4” 1024 x 768 TFT LCD		
Dimension (mm)	298 (W) x 819 (D) x 936 (H)		
Weight (kg)	80		

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