PhotoSana

PICOCLARANS

Picosecond Aesthetic Laser

Fast, Safe and Effective Pigment Lesion Treatment & Tattoo Removal

PicoClarans is the most advanced picosecond Nd:YAG treatment solution available today. It is designed with its pulse duration at 150 ps, which is the shortest pulse duration among laser systems for aesthetic-medical indication in the world. Special shape pulse profile provides the most effective way to remove natural or artificial (tattoo) pigmentation, while minimizing the risk of damage to surrounding tissues.

Indications:

- Tattoo Removal
- Skin Remodelling & Lifting
- Pigmented Lesions & Skin Brightening

Skin Remodelling & Lifting

PicoClarans provide revolutionary minimally invasive laser technology for skin rejuvenation by creating isolated microscopic lesions within tissue below the epidermis using laser induced optical breakdown (LIOB). Tightly focused near-infrared laser pulses of PicoClarans are used to create optical breakdown in the dermis while leaving the epidermis intact, resulting in lesions due to cavitation and plasma explosion.

Technology Advantages:

- No or little social down-time;
- Efficacy: comparable to conventional fractional ablative techniques;
- Safe, breakthrough treatment procedure for skin rejuvenation without damaging the epidermis;
- Stimulation of collagen and elastin;
- Laser Induced Optical Breakdown (LIOB).

Pigmented Lesions & Skin Brightening

Epidermal pigmentation:

- Solar lentigines
- Freckles
- Seborrheic Keratoses
- Café-au-lait
- Nevus spilus
- Post inflammatory hyper-pigmentation (PIH)

Dermal pigmentation:

- Nevus of Ota
- Nevus of Ito
- Blue nevus
- Becker's nevus
- Melasma
- Acquired dermal melanocytosis (ADM)
- -Hori's nevus
- -Acquired bilateral nevus of Ota like maculae

Tattoo Removal

Since different color ink absorbs a specific wavelength, PicoClarans offers two 1064 nm and 532 nm wavelengths to treat the broad range of tattoo colors. Picosecond laser breaks the pigment particles to much more tiny size. The pulse duration of PicoClarans (150 ps) is 100 times shorter than general Q-switched Nd:YAG laser (10 ns). Thus, PicoClarans gives less damage to surrounding tissue as its peak power is much higher than Q-switched.

Laser	Nd:YAG	
Wavelength (nm)	1064	532
Maximum Pulse Energy (mJ)	250	120
Pulse Width (ps)	150	
Max Energy Density (J/cm^2) (zoom handpiece)	up to 7.96	up to 3.82
Peak Power (GW)	1.67	0.8
Repetition Rate (Hz)	1-10	

Handpiece	Zoom	Fractional
Spot Size (mm)	2-8 mm	8 mm

Dimensions	1020mm ×1 255mm × 527mm (H×W×D)
Electrical Requirements	220-240V,4.5kVA 50/60 Hz, single phase

PhotoSana UAB
Innovative medical laser systems manufacturer

Mokslininkų st. 11
LT-08412 Vilnius
info@photosana.eu