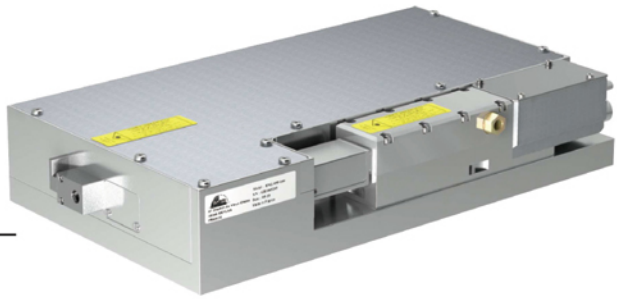
脈衝式固態雷射
Pulsed Solid-State Laser

Composing with light
teem photonics

PicoFlash™ 355nm紫外光雷射

PicoFlash™: Fiber Amplified, Picosecond Microchip Lasers



Applications

- Micromachining
  - Scribing silicon
  - Cutting glass
  - Drilling copper
- Instrumentation
  - Fluorescence
  - Imaging
- Marking
  - Glass
  - Fused Silica
  - Sapphire
  - Diamond
- Health Sciences
  - Microsurgery

PicoFlash™ is the ultimate association of Passively QSwitched (PQS) microchip laser technology and fiber amplification, resulting in close to one Watt of high quality UV laser light. This laser combines pulses as short as seven hundred picoseconds with a high pulse repetition frequency while maintaining an excellent good beam quality.
A PQS microchip laser is the seed of PicoFlash™ and sets the short pulse width while the fiber amplifier provides the gain, compactly and efficiently. This Master Oscillator Fiber Amplifier (MOFA) architecture enables a constant pulse width, while allowing the user to vary the pulse energy (or peak power). The output is free-space coupled, preserving peak power and beam quality.
The third harmonic conversion stage of the PicoFlash™ series delivers UV light with a Gaussian like beam which enables tight focusing an high power densities.

PicoFlash™ HNV lasers

Model	HNV-05P-100
Wavelength (nm)	355
M^2	1.2
Energy/Pulse (μJ)	6
Pulse Width (ps)	700
Peak Power (kW)	10
Repetition rate (kHz)	140
Average Power (mW)	840

Features & benefits

Ultrashort pulses that stay constant while varying pulse energy
As low as 700ps duration and up to 6μJ/pulse

High UV peak power
10 kW per pulse

High pulse Repetition Frequency
140 kHz gives high speed processing

Adjustable pulse energy
Pulse energy turned on in <300μs, turned off in <600μs

Excellent beam quality
Gaussian, TEM00

Efficient, air cooled
Typically consumes <350W

Licensed Technology
Passively Q-switched picosecond microchip lasers: US Patent 5394413

CDRH compliant

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