

Features & benefits

Ultrashort pulses

As low as 300ps duration

High peak power

Achieving 100kW per pulse

Excellent beam quality

Gaussian beam, TEM 00, $M^2 \leq 1.3$

Integrated system

All in one package including power supply and cooling

Synchronization output

Photodiode monitoring of laser emission

Long UV life

High reliability pump diode, specialty UV optics, and sealed package contribute to lifetimes expected to exceed 5,000 hours (consult factory for details)

Licensed Technology

Exclusive license on Passively Q-switched picosecond microchip laser: US Patent 5394413

Optional features

Fixed frequency choices

Can operate at up to 3 fixed repetition rate frequencies, set at factory

Triggerable by user

External trigger, with TTL compatible input on Sub-D connector

Manual controls for CDRH compliance

355nm Passively Q-Switched Nd:YAG lasers: high irradiance, integrated head (PNV-M series)

Teem Photonics' PowerChip series are ultra high peak power, high repetition range passively Q-switched MicroChip lasers capable of producing hundreds of picoseconds and several tens of microJoules pulses at kilohertz repetition rates with excellent beam

quality. Furthermore, the PowerChip is a completely integrated platform which includes the laser head, power supply and air cooling in a compact, rugged, turnkey package.



Ultra Violet 355nm PNV-M lasers

Model	PNV-M01510	PNV-M02510	PNV-M05005
Peak Power (kW)	70	90	100
Average Power (mW)	18	28	25
Repetition rate (kHz)	1	1	0.5
Pulse Width (ps)	300	300	450
Energy/Pulse (µJ)	18	28	55

Typical values

Applications

- ▶ Materials processing
 - Inscribing glass
 - Via drilling printed circuit boards
 - Micromachining diamond
- ▶ MALDI-TOF
- ▶ Microdissection
- ▶ Laser Induced Fluorescence (LIF)
- ▶ Time Resolved Fluorescence
- ▶ Laser Induced Breakdown Spectroscopy (LIBS)
- ▶ Light Detection and Ranging (LIDAR)