Brevity HP (Pre-release) The mid-IR μJ class laser





150 µm NOVAE

SETUP FOR BULK SILICON MACHINING AT 150 μm DEPTH



EXAMPLE OF BULK SILICON MACHINING AT 150 µm DEPTH

- 1.96 μm central wavelength
- High energy > 3 μJ
- Sub 2 ps pulses
- PER > 20 dB
- High beam quality M² < 1.5</p>
- ≥ 100 kHz repetition rate

KEY APPLICATIONS

- Semiconductor bulk engraving
- Polymer machining
- Nonlinear optics
- Seed source for high power systems

Brevity High Power is a turn-key picosecond fiber laser emitting at 1.96 µm. The very high peak power (>2MW) associated to the long wavelength allow the use of this laser in a wide range of industrial applications such as cold ablation of polymers or semiconductor bulk engraving. Based on a patented seed source and robust CPA architecture, this fibre laser is your best candidate when conventional wavelength does not meet your demand!

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Optical specifications

Central wavelength	1.96 μ m \pm 20 nm
Average power	> 300 mW
Pulse energy (at 100kHz)	> 3 µJ
Repetition rate	100 kHz [*] - Burst mode operation compatible
Pulse width	< 2 ps (FWHM assuming sech ² fit)
Average power stability (RMS over 8 hours)	< 2 % ^{**}
Pulse energy stability (RMS over 1000 consecutive shots)	< 2 %
Beam pointing stability	< ±20 μrad/Κ
Laser output	Collimated
M ²	< 1.5
Polarization state	Linear (PER > 20dB)

* Higher repetition rate on demand

** Upon stable environmental conditions 21°C ± 2°C

Options / Accessories

Process Shutter	Pulse on demand operation
Variable attenuator	10 – 100% transmission
Second Harmonic Generation	>1µJ @ 980 nm ± 10nm







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