

Technical Data Sheet



finesse⁶

6W Ultra quiet CW 532nm laser

6 W

The **finesse 6** heralds a new era in affordable optical pump sources. Delivering 6 Watts CW at 532nm, and with the diode fibre-coupled to the head; it is small, efficient and does not require water-cooling. These features make the finesse an ideal OEM laser or research tool.

Specifications

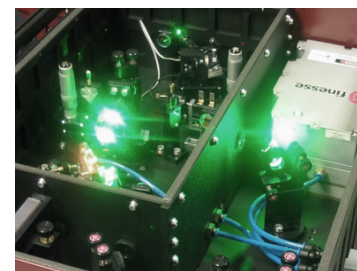
power	6 Watts
wavelength	532 nm
beam size	2.3 mm
spatial mode	TEM ₀₀
bandwidth	50 GHz
divergence	0.4 mrad
M-squared	< 1.1
power stability	< 1.0 % rms*
RMS noise	< 0.5 %
noise bandwidth	1 Hz to 6 MHz
polarisation ratio	100:1
polarisation direction	horizontal
coherence length	6 mm
beam angle	1 mrad**
operating temperature	25 - 40 deg C
head weight	2.5 kg
umbilical length	2 m
warm-up time	10 min

* test duration 8 hrs

** tolerance relative to head orientation

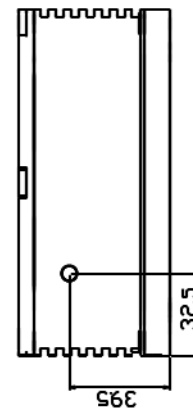
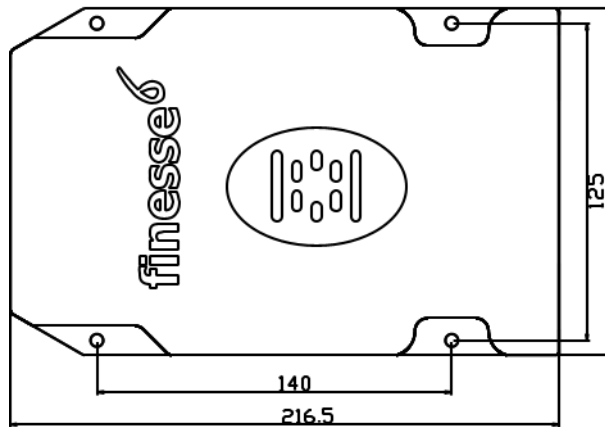
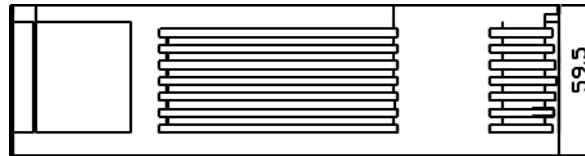
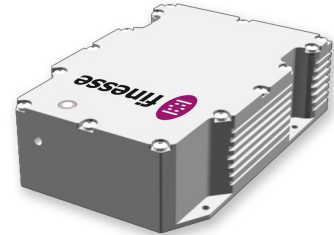
Features

- extremely low noise
- automatic power control
- fibre-fed pump
- diffraction limited beam
- no closed-loop cooling
- zero-stress cavity
- hermetically sealed
- physical shutter
- extended warranty available
- single-phase mains driven
- diode 22,000 hrs MTBF
- 2 year diode warranty
- full RS232 control



The finesse integrates easily into transportable, commercial femtosecond oscillator packages.

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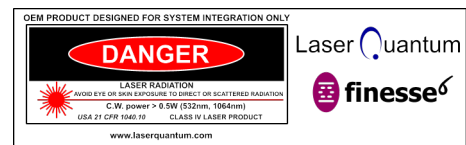


Typical Applications

- femtosecond Ti:Sapphire pumping
- marking/ etching
- biomedical imaging

PSU options

fpu 35



Allow 100mm clearance at rear for bend radius of umbilical.
Drawings not to scale.

Laser Quantum has a policy of continuous improvement, therefore specifications are subject to change without notice.

Laser Quantum's scientific and industrial lasers are certified to comply with:
IEC 60825 and Federal regulations (21 CFR - subchapter J) as administered by CDRH on shipments ordered after August 2 1976.

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