

Technical Data Sheet



forte

Highly compact CW infrared laser

The forte 1064 offers up to 0.1W of variable output power in a rugged package. The system is available with a choice of power supply units to suit the application. With excellent stability and beam characteristics, this laser is ideal for optical tweezers and non-destructive testing applications.

Specifications

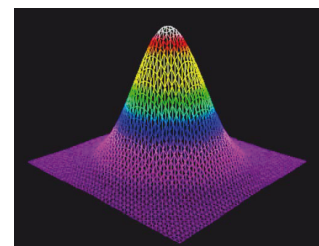
| | |
|------------------------|-------------------|
| power | 0.1 - 1W |
| wavelength | 1064nm |
| beam size | 1.5 +/- 0.5mm |
| ellipticity | 2.5 |
| spatial mode | TEM ₀₀ |
| bandwidth | 60 GHz |
| divergence | < 2.5mrad |
| M-squared | 2.5 |
| power stability | < 1.0% rms* |
| RMS noise | < 0.5% |
| noise bandwidth | 1Hz - 100MHz |
| polarisation ratio | 100:1 |
| polarisation direction | vertical |
| coherence length | 5mm |
| beam angle | 1 mrad** |
| operating temperature | 10 - 40 degC |
| head weight | 0.4kg |
| umbilical length | 1.5m |
| warm-up time | 10 min |

*test duration 8 hours

**tolerance relative to head orientation

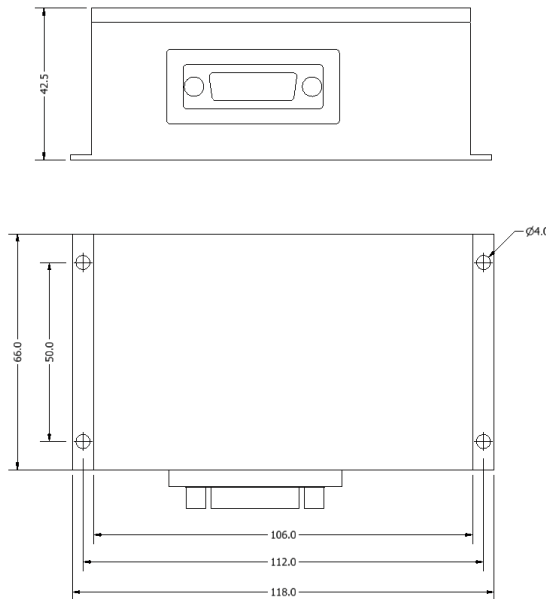
Features

compact, sturdy design
zero stress
permanently aligned cavity
hermetically sealed
scientific power supply
extended warranty available
single phase mains driven
diode 18,000 hours MTBF
direct modulation up to 30kHz



The forte's beam fits a near perfect gaussian profile in both directions.

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Typical Applications

optical tweezers
imaging systems test
near IR optical testing

PSU options

smd6000
mpc6000



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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