

High Power Single Mode 1060nm Laser

(Pulse, Up to 20W SM, Turn-Key Benchtop)



The HPSL High Power Single Mode Laser is a user-friendly turn-key benchtop unit that delivers up to 20W single mode and 10W polarization Maintain stable laser output. The output is in pulse mode with frequency adjustable from 33 to 80kHz. The output power is adjustable from 10-100%. It has a front power control knob and USB computer interface. The output is a collimator with a built-in isolator. An emission switch adds safety.

Features

- Low Cost
- High Reliability
- High Power
- Single Mode
- USB
- Turn-Key Benchtop

Applications

- Lab
- OEM
- Sensor
- Instrumentation

Specifications

| Parameters | Min | Typical | Max | Unit |
|---------------------------------------|------|---------|------|------|
| Operation Wavelength | 1055 | 1060 | 1072 | nm |
| Operation Mode | | Pulsed | | |
| Output Power | 2 | | 20 | W |
| Bam Quality | 1.2 | 1.3 | 1.35 | M2 |
| Beam Diameter (with collimator) | | 6 | 9 | mm |
| Spectral Linewidth | | 9 | 12 | ns |
| Pulse Energy | 1 | | 1.5 | mJ |
| Output Power Adjust Range | 10 | | 100 | % |
| Pulse Frequency Range | 33 | | 88 | kHz |
| Output Power Stability (within 48 hr) | | ±5 | ±8 | % |
| Operating Temperature | -5 | | 35 | °C |
| Storage Temperature | -40 | | 85 | °C |
| Electrical Power Consumption | | | 150 | W |
| Power Input | 110 | | 120 | VAC |
| Computer Interface | USB | | | |
| Package Dimension | | | | |



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Operation Manual

- Plug AC power
- Turn ON The Power Switch
- Adjust The Output Power to Minimum by Turning The Knob All Way Counter Clockwise
- Turn On The Emission Switch
- Increase The Out Put Power by Turning The Knob Clockwise
- To Modulator The Laser, Turn On The Modulation Switch at the Back, Input a 0-5V Modulation Signal Via The BNC Connector
- The Laser Can Also Be Controlled By a Computer via The USB/GUI Interface

Mechanical Dimension

*Product dimensions may change without notice. This is sometimes required for non-standard specifications.



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Typical Spectrum

Ordering Information

| | <input type="checkbox"/> | <input type="checkbox"/> | 1 | 1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 11 |
|--------|--------------------------|--------------------------|---------------------|------------|--|--------------------------|--------------------------|----|
| Prefix | Wavelength | Output Power | Mode ^[1] | Modulation | Output Configuration | Power Supply | Interface | |
| HPSL- | 1060nm=1 | 20W = 2 Special = 0 | Random = 1 | Pulsed | Isolator/Collimator = 1 Isolator/Fiber = 2 Fiber = 3 | 120-220V = 1 | USB = 1 RS232 = 2 | |

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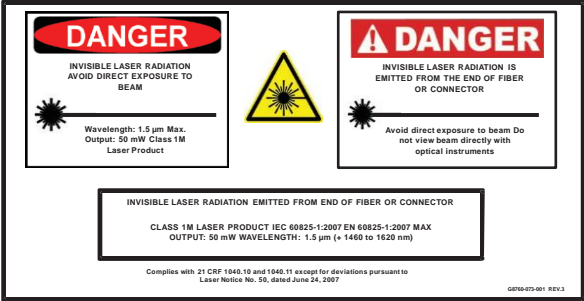
USB Command List

Laser Safety

This product meets the appropriate standard in Title 21 of the Code of Federal Regulations (CFR). FDA/CDRH Class 1M laser product. This device has been classified with the FDA/CDRH under accession number 0220191. All versions of this laser are Class 1M laser products, tested according to IEC 60825-1:2007 / EN 60825-1:2007. An additional warning for Class 1M laser products. For diverging beams, this warning shall state that viewing the laser output with certain optical instruments (for example eye loupes, magnifiers, and microscopes) within a distance of 100 mm may pose an eye hazard. For collimated beams, this warning shall state that viewing the laser output with certain instruments designed for use at a distance (for example telescopes and binoculars) may pose an eye hazard.

Wavelength = 1.3/1.5 μm .

Maximum power = 30 mW.



*Caution - Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

*IEC is a registered trademark of the International Electrotechnical Commission.



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Questions and Answers

Q: