

3/5/7 UP System



Applications

- Raman Spectroscopy
- Illumination
- Remote Sensing

Key Features

- Up to 7X fiber beam-combined laser source
- 400-um-core 0.39 NA fiber-coupled output with flat top beam profile
- Remote interlock
- CW or QCW operation up to 1 kHz
- Spectral linewidth < 0.2 nm

The Innovative Photonic Solutions (IPS) 785 nm Multi-laser Spectrum Stabilized Laser Module provides the user with a powerful and extremely stable laser source that is ideal for scientific applications including Raman Spectroscopy and Illumination. This multi-mode laser module is a Class 4 laser product with laser emission at various wavelengths and output power levels up to 5W. Extreme care should be taken when operating this unit to avoid potentially hazardous exposure to both eyes and skin. Users should wear eye protection when operating this unit and should avoid eye or skin exposure to direct or scattered radiation.

Standard Wavelengths

| | |
|-------|--------|
| 785nm | 830nm |
| 808nm | 1064nm |

785nm Specifications



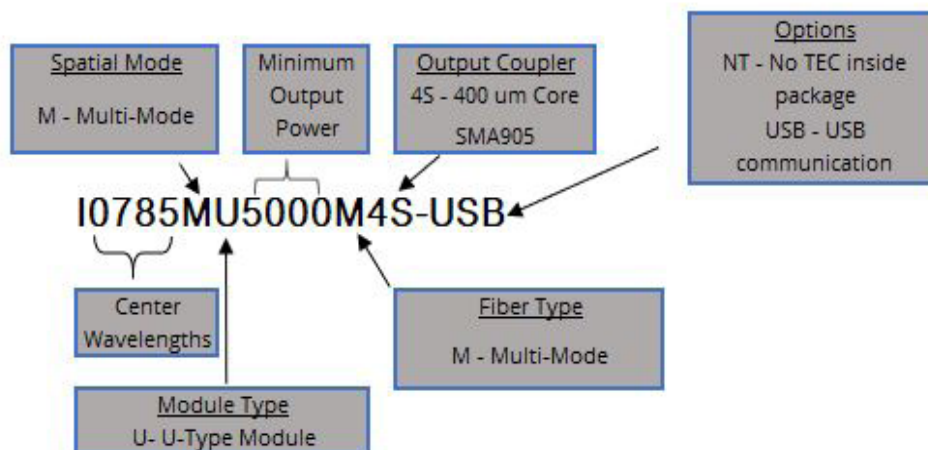
| Parameter | Unit | Min | Typ | Max |
|---------------------------------------|---|------------|-----------|-------|
| Wavelength | nm | 784.5 | 785 | 785.5 |
| Spectral Linewidth | nm | | 0.15 | 0.2 |
| Output Power | mW | 5000 | 6000 | |
| Modulation Rate* | | Continuous | 1 KHz | |
| Pulse Length ** | Degrees | 20 μ s | Continous | |
| Beam Divergence *** | | 10 | 20 | |
| Beam Profile | Multi-Mode Beam Profile - Flat top spatial output | | | |
| Internal Fiber Type | 400 micron core Multi-Mode fiber (0.22 NA) | | | |
| Maximum Permissible Exposure (MPE) | mW/cm ² | | | 1.9 |
| Nominal Oxular Hazard Distance (NOHD) | cm | 140 | | |

* Based upon user defined input signal and operation in "External" mode configuration

** Peak power level cannot exceed CW output power level

*** 400 micron core multi-mode fiber pigtail with 0.36 NA (Full Angle)

Part Schema



Selected Data



| Mechanical Specifications (Controller Module) | |
|---|--|
| Physical Dimensions | 9.45" x 6.94" x 4.14" |
| Module Weight | 48 Ounces |
| Environmental Conditions | |
| Temperature | +10 °C to + 35 °C Operations, -10 °C to +55 °C Storage |
| Environment | 0-80% Humidity, non-condensing |

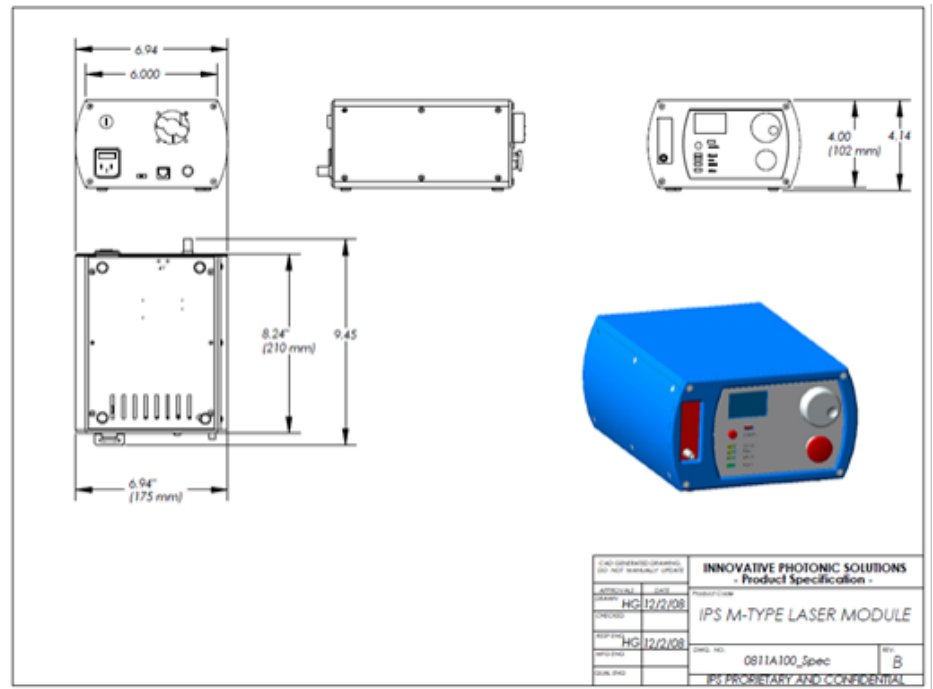
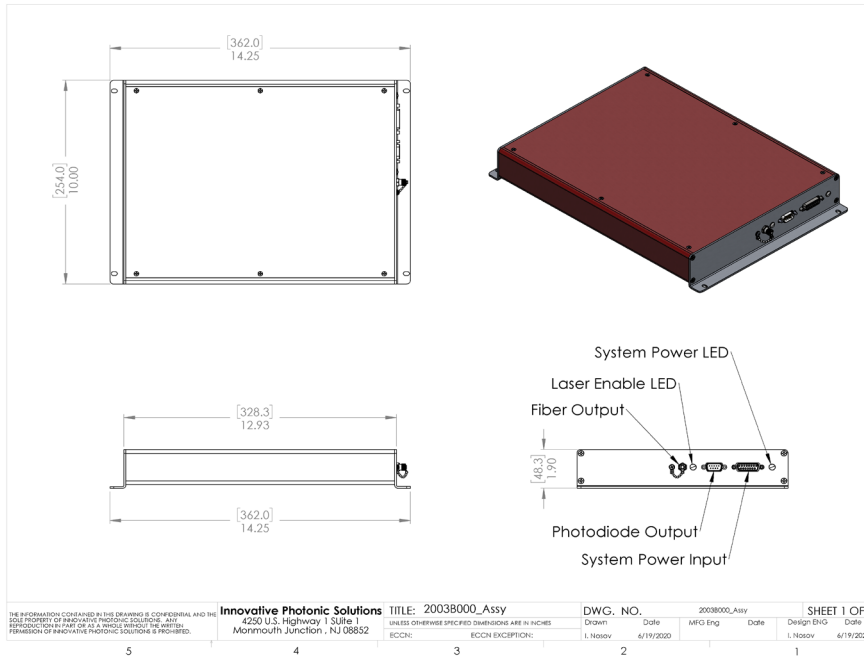
Custom Capability

- Custom wavelengths available upon request

Electrical Specs

| | |
|-------------|--|
| Input Power | 100 - 240 VAC 50 - 60Hz, 0.4A |
| Fuse Rating | 250V, 1A, FastBlow 5mm x 20mm, 2 each |

Mechanical Drawings



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