

Multi-Mode Digital M-Type Module



Applications

This laser package is designed for OEM Integration and is ideal for:

- High Resolution Raman Spectroscopy
 - Portable Raman
 - Process Raman
- Direct-diode Frequency Doubling
- Fiber Laser Seeding
- Remote Sensing

Key Features

- Wavelength Stabilized Spectrum
- High Power Multi-Mode Fiber Coupled Output
- Power adjustable
- UL/CE and IEC Certified
- Turn-Key Operation
- Narrow Spectral Linewidth (< 0.1nm FWHM)
- USB Connectivity with dual port USB hub
- 40 dB SMSR Typical
- Side panel can be opened, and the “guts” of the laser (U-Type module) can be removed to allow for different wavelengths to be “dropped-in”

Standard Wavelengths

638nm
680nm

785nm
808nm

830nm
1064nm

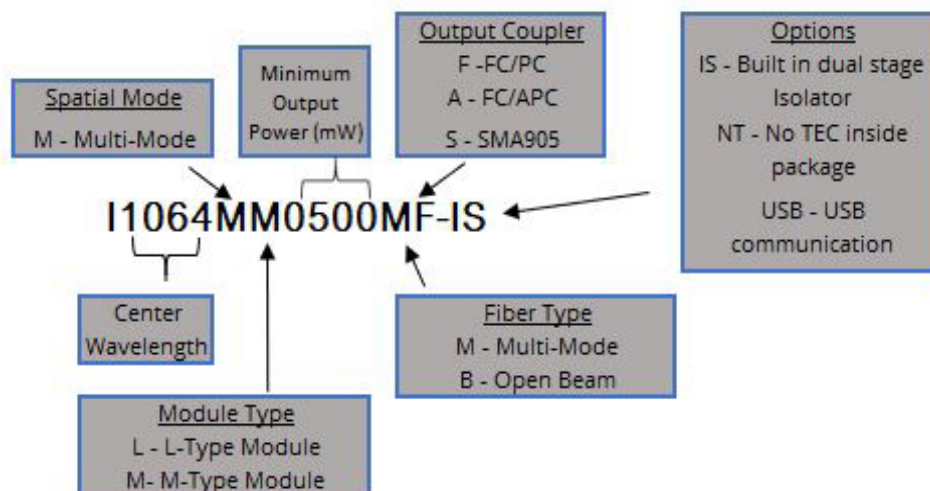
Specifications



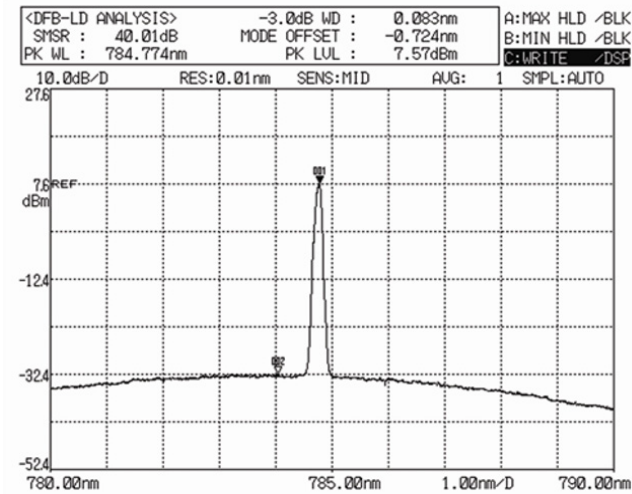
Wavelegnth Tolerance	+/- 0.5nm
Narrowed Linewidth Spectral Linewidth	<0.1nm (0.08nm typical)
SMRS	35dB - 45dB
Wavelength Stability Range	10 - 35 °C
Output Power Stability	<1% at constant Tcase (sample rate of 1 per 1 second.)
Modulation Rate	CW to 10KHz at 50% duty cycle or CW to 1kHz at 10% - 100% duty cycle.
Warm-Up Time	10 seconds from cold start
	1.5 seconds from warm start

λ (nm)	Min. Power (mW)	Base Part Number
638	300	I0638MM0300MF-USB
680	300	I0680MM0300MF-USB
785	350	I0785MM0350MF-USB
	500	I0785MM0500MF-USB
	1200	I0785MM1200MF-USB
808	350	I808MM0350MF-USB
	500	I0808MM0500MF-USB
830	350	I0830MM0350MF-USB
	500	I0830MM0500MF-USB
	1200	I0830MM1200MF-USB
1064	500	I1064MM0500MF-USB

Part Schema



Selected Data



Optical Fiber	105/125 micron multimode fiber, 0.22NA
Connector	FC/PC or SMA905
Module Dimensions	9.48in. (240.79mm) x 6.94in. (176.28mm) x 4.14in. (105.16mm)
Module Weight	48oz. (1361g)
Case Material	Anodized Aluminum
Environment	0-80% Humidity, non-condensing
Storage Temperature	-50 to 90 °C
Regulatory	RoHS 2.0, UL/CE, IEC

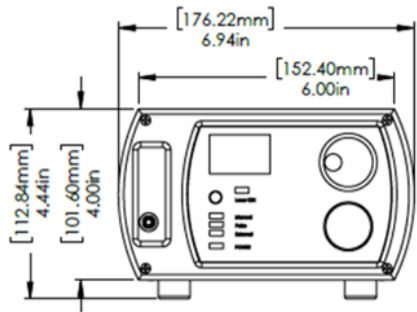
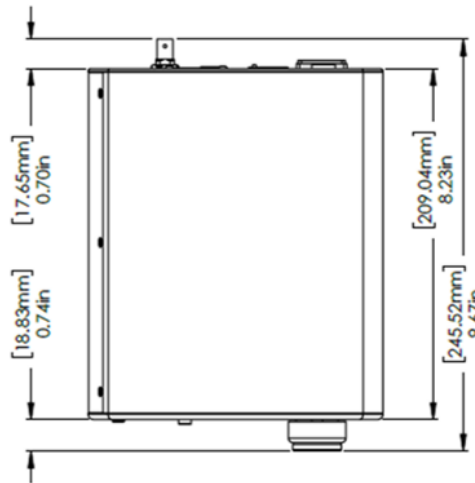
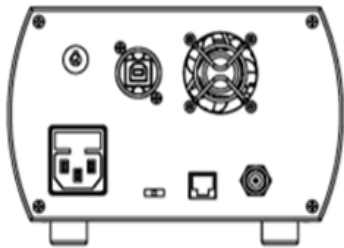
Custom Capability

- Custom wavelengths available upon request
- FC/PC or SMA output coupler
- Various diameter output fibers available
- External TEC (e.g. No TEC inside of package optional)

Electrical Specs

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

Mechanical Drawings



Operational Notes

1. Knob on front adjust power by adjusting drive current. LED readout is in amperes.
2. Module includes 2-port USB hub to allow connection to additional USB devices
3. 100-105 micron core fiber is standard. 62.5 micron core fiber available upon request but will affect output power. Please ask for part number.
4. M-type is power adjustable. If locked power is required, see L-type module data sheet.
5. See Operation Manual for full operating and safety instructions. This document is meant to offer a product overview.

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