

Ultra Compact OEM Laser Module OEM-I

Model #: OEM-I

Description: An ultra-compact OEM laser module features high power and small form factor, various wavelengths available from 405 nm to 1319 nm. It can be used for industrial, medical, scientific fields. It is a perfect choice for design and integration into OEM instrumentation and systems, it can also be used for end user's research and development.

Application:

- Confocal microscopy
- Medical treatment
- Scientific research
- Cell sorting
- Optical instrumentation
- OEM integration

Features:

- Ultra compact
- Plug and play
- Cost effective
- Various wavelengths
- Easy integration
- Can be equipped with software

Specifications:

Wavelength (nm)	Type	Output Power (free space)	Output Power (Fiber pigtail)	Spectral Linewidth FWHM (typical)	Noise (20Hz – 20MHz)
405 ± 5 nm	Diode	1.5 W	1.2 W	2 nm	0.5%
445 ± 5 nm	Diode	15 W	13 W	2 nm	0.5%
450 ± 5 nm	Diode	15 W	13 W	2 nm	0.5%
455 ± 5 nm	Diode	15 W	13 W	2 nm	0.5%
460 ± 5 nm	Diode	10 W	8.5 W	2 nm	0.5%
465 ± 5 nm	Diode	10 W	8.5 W	2 nm	0.5%
520 ± 5 nm	Diode	3.8 W	2.5 W	0.2 nm	0.5%
637 ± 5 nm	Diode	2.5 W	2 W	2 nm	0.5%
640 ± 5 nm	Diode	2.5 W	2 W	2 nm	0.5%
473 ± 1 nm	DPSS	1 W	0.8 W	0.2 nm	3%
532 ± 1 nm	DPSS	5.5 W	5 W	0.2 nm	1%
561 ± 1 nm	DPSS	0.3 W	0.2 W	0.2 nm	3%
589 ± 1 nm	DPSS	0.8 W	0.6 W	0.2 nm	1%
593 ± 1 nm	DPSS	0.3 W	0.2 W	0.2 nm	3%
671 ± 1 nm	DPSS	1.5 W	1.2 W	0.2 nm	3%
1319 ± 1 nm	DPSS	1 W	0.8 W	0.3 nm	3%

Beam Properties (For DPSS):

- Transversal mode: Near TEM00
- Beam diameter at aperture (1/e²): ~3 mm
- Beam divergence (full angle): <1 mrad
- Polarization ratio: better than 100:1

Modulation:

- All diode lasers can be modulated up to more than 100kHz via TTL pin
- All DPSS lasers can be modulated at 0~30kHz TTL pin

Fiber Specs:

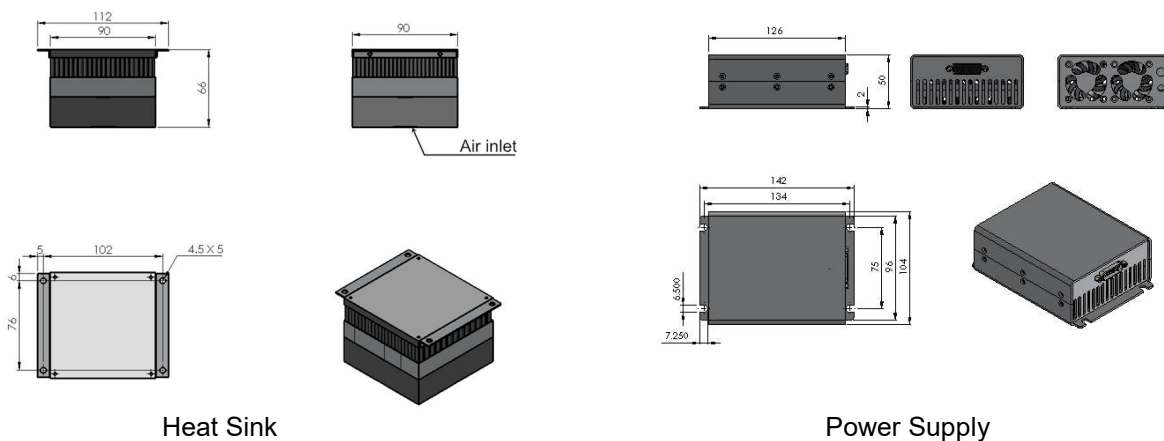
- Fiber core diameter: $\geq 200 \mu\text{m}$
- All lasers are made with FC or SMA905 connectors
- Standard length of a fiber is 1 m or 2 m, other lengths available on request.

Physical Properties:

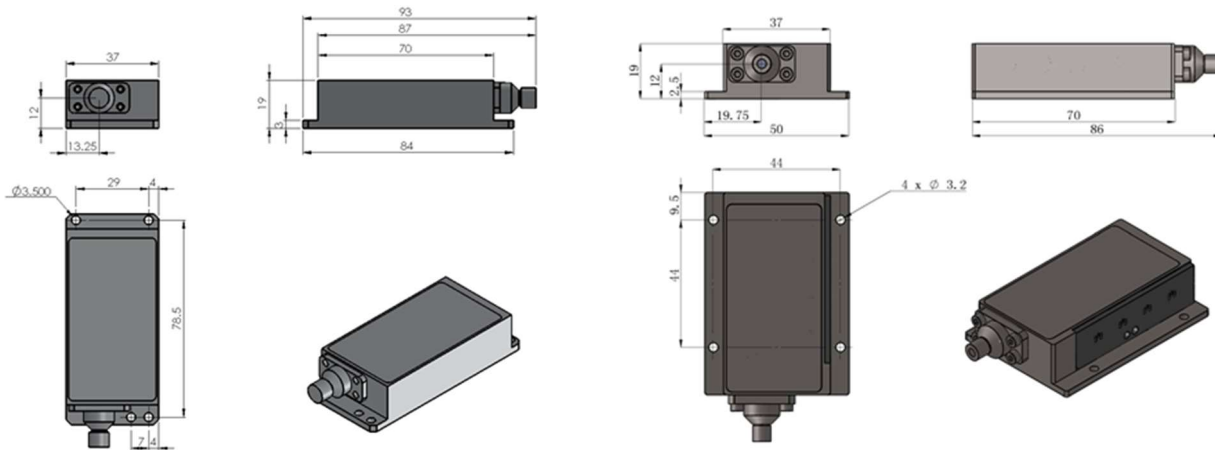
- Control interface type: RS232 or USB
- External power supply requirement: +12VDC, 16.7A for DPSS (with driver), +12VDC, 6A for diode (with driver)
- Dimensions (L-W-H): 86 (L) \times 50(W) \times 19 (H) (excluding pins and output window)
- Beam height from the base: 12 mm
- Optimum heat sink temperature (non-condensing): +15...+30°C
- Max. heat sink temperature 40°C
- Internal temperature stabilization: TEC
- Overheat protection: Yes
- Storage temperature (non-condensing): -10 to +50 °C
- Warranty: 12 months

Options & accessories:

- Heat sink
- Power supply



Laser Dimension



86 (L) × 50 (W) × 19 (H) mm³

93 (L) × 37 (W) × 19 (H) mm³

Text Result Sample

