

Monsoon Series

High Power Laser Diode Bar on Micro-Channel Cooler and Multi-Bar Modules



The II-VI Laser Enterprise hard-soldered *Monsoon* micro-channel cooler series has been designed to provide an extremely compact source of very high intensity light. The stackable micro-channel coolers provide modular flexibility to match your application. We offer various standard configurations of vertical and horizontal stacks and we can match your special needs on request.

The proprietary E2 front mirror passivation process, developed at our Zurich site, prevents Catastrophic Optical Damage (COD) to the laser diode facet even at extremely high output powers. Our hard-solder technology provides unmatched reliability also for demanding applications and enables high power output at CW or QCW operating conditions without sacrificing lifetime.

Designed and built to meet specific customer requirements, the scalable *Monsoon* platform will accommodate the future power needs for industrial, medical and defense applications. Contact your local sales office for more information.

Features:

- Mounted 10mm laser diode bar, various standard bar configurations (custom bar configurations available on request)
- Active *Monsoon* micro-channel cooler offering a scalable platform for vertical and horizontal stacking
- Hard-solder mounting technology for superior reliability
- Vertical and horizontal standard stack configurations (custom configurations available on request)
- Highly reliable MBE and MOCVD epitaxy grown and processed in our state-of-the-art Zurich facility
- Standard wavelengths at 790nm, 808nm, 880nm, 9xx-10xxnm (others available on request)
- Up to 200W CW (880nm, 9xx-10xxnm) or 100W CW (808nm) power per bar
- RoHS compliant 

Applications:

- Solid-state laser pumping
- Direct applications such as material processing (plastics welding, heat treatment, annealing, hardening etc.)
- Printing and Reprographics
- Medical, Life and Health Sciences
- Defense and Security
- Illumination

Vertical Stack		Horizontal Array
Frameless	Compact Framed	Linear
Plate count: 1-8 Standard: 3x1 and 8x1 Up to 1600W 1.8mm pitch FAC option	Plate count: 1-36 Standard: 12x1 Up to >6kW 1.8mm pitch FAC option	Plate count: 1-6 Standard: 1x4 Up to 300W

Key Specifications	795 - 800 nm	805 - 811 nm	880 nm	915 nm	940 - 980 nm	1060 nm
Wavelength Tolerance	± 3nm / ± 10nm	± 3nm / ± 10nm	± 3nm / ± 10nm	± 10nm	± 10nm	± 10nm
40/50W Bar	X	X		X	X	X
80/100W Bar	X	X		X	X	X
200W Bar			X			
Spectral Width (FWHM)	2.5nm/ or 5nm	2.5nm/ or 5nm	2.5nm/ or 5nm	< 5nm	< 5nm	< 5nm
PCE (typical)	50%	50%	>60%	>60%	>60%	>60%
Options	FAC & SAC lensing, Beam shaping etc					

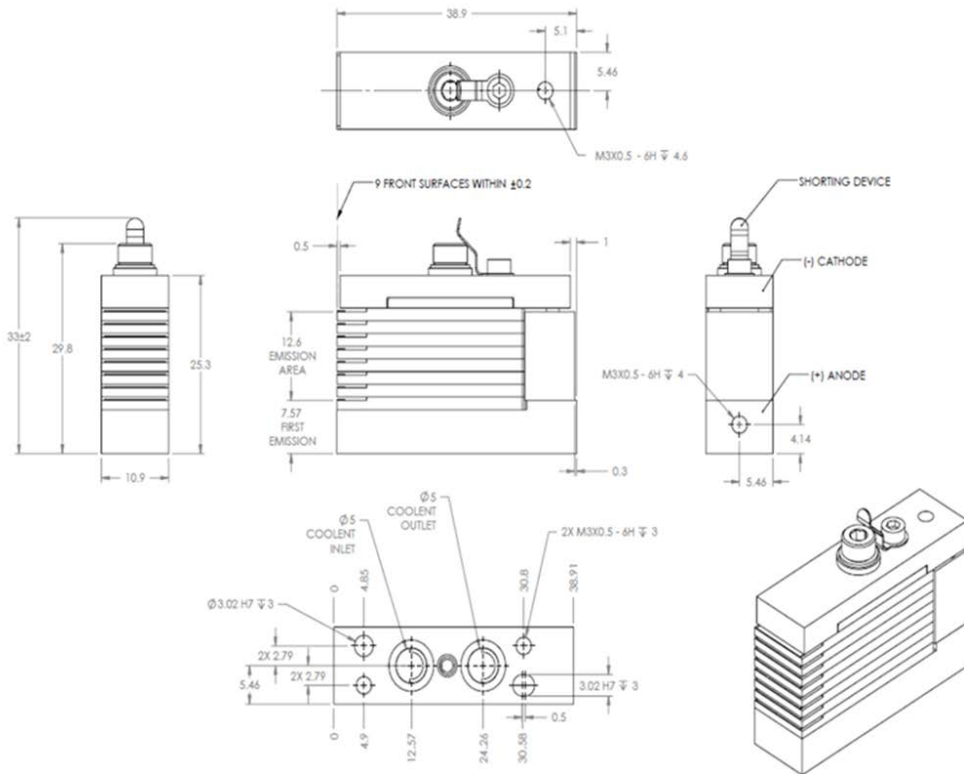
Custom configurations and wavelengths available on request, contact sales for more information.

Data Sheet

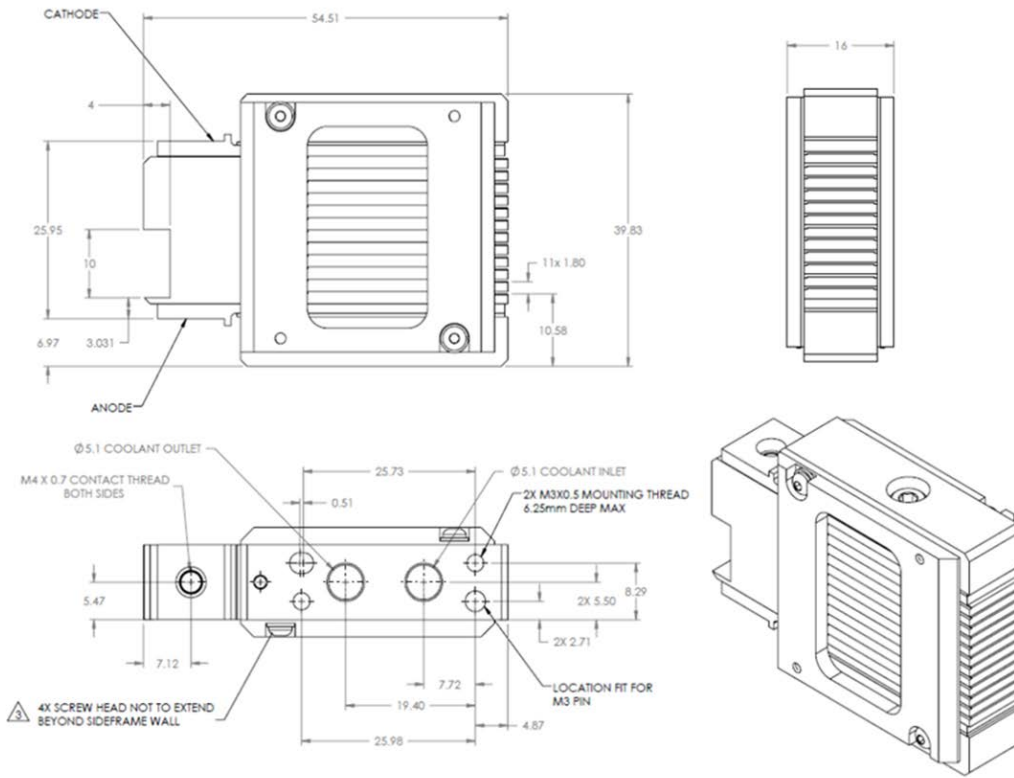
Drawings (typical values)

All dimensions in millimeter if not otherwise indicated.

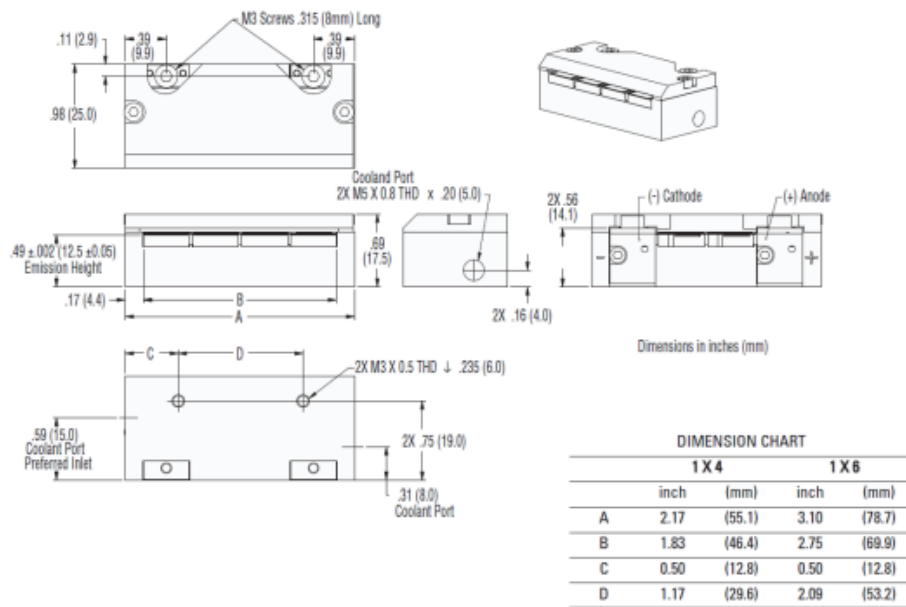
Frameless vertical 8-bar stack



Compact framed 12-bar vertical stack



Horizontal 4-bar linear array



RoHS Compliance



II-VI Laser Enterprise is fully committed to environment protection and sustainable development and has set in place a comprehensive program for removing polluting and hazardous substances from all of its products. The relevant evidence of RoHS compliance is held as part of our controlled documentation for each of our compliant products. RoHS compliance parts are available to order, please refer to the ordering information section for further details.

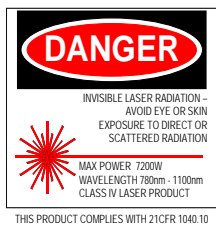
Ordering Information:

Contact your local sales office for more information.

Contact Information: www.laserenterprise.com

Important Notice

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