

638nm, Liquid Cooled, Fiber-Coupled, Conduction-Cooled, Tailored Bar Module

Features

- Conduction-cooled diode laser bars inside
- Single wavelength
- High coupling efficiency
- Scalable output power

Optional Accessories

- Integrated power meter
- Integrated NTC temperature sensor



Device Specification

Optical Parameters ¹	Units	
Center Wavelength ^{2, 3}	nm	638
Wavelength Tolerance	nm	±2
Output Power ¹	W	40
Number of Bars	#	7
Spectral Width (FWHM)	nm	<2
Slope Efficiency	W/A	>5.0

Fiber Parameters ⁵		
Fiber Core Diameter ^{2, 4}	µm	400
Numerical Aperture	NA	0.22
Fiber Connector		SMA

Electrical Parameters ¹		
Power Conversion Efficiency	%	>23
Threshold Current (I _{TH})	A	<4
Operating Current (I _{OP})	A	<12
Operating Voltage (U _{OP})	V	<16

Thermal Parameters ⁵		
Operating Temperature ^{2, 3, 4}	°C	+20 to +25
Storage Temperature ⁴	°C	+5 to +60
Coolant Flow Rate	l/h	120
Water Temperature	°C	+20 to +25
Purity		Tap Water

Mechanical Parameters		
Size		See Drawing
Weight	kg	~1.2

¹Data at 20°C cold plate temperature, unless otherwise stated.

²Reduced lifetime if used above nominal operating conditions.

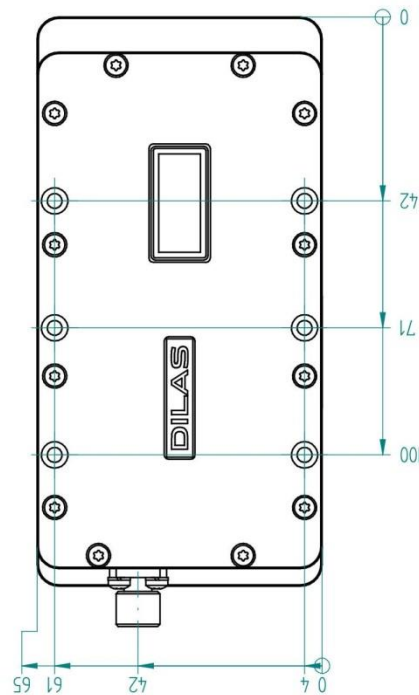
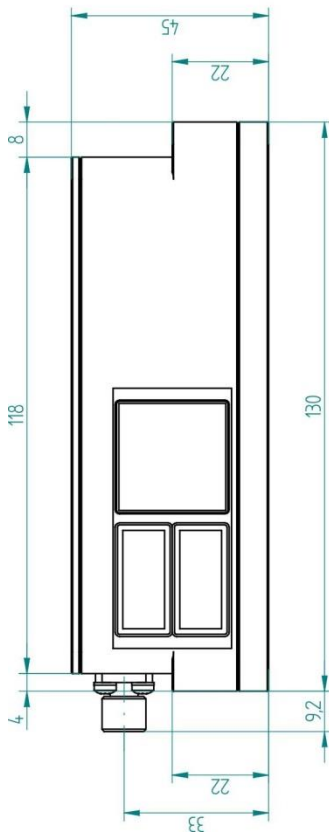
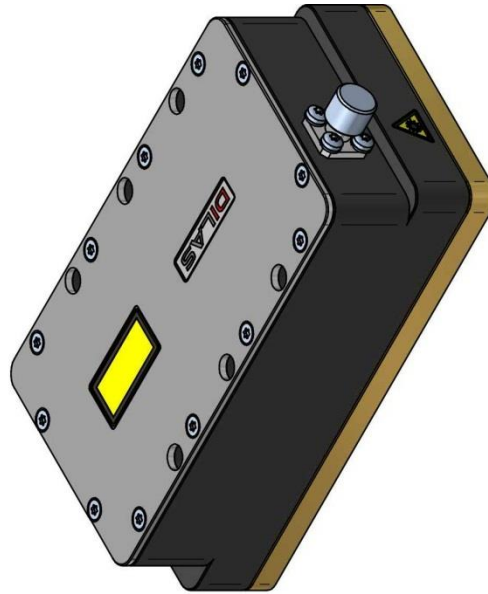
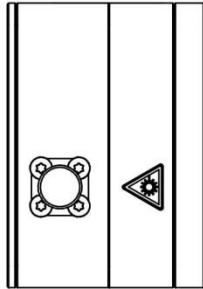
³Others available upon request.

⁴Additional information available upon request.

⁵A non-condensing environment is required for storage and operation.

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Package Dimension



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