

9xxnm, 400µm, Conduction-Cooled, Fiber-Coupled, Multi-Bar Module

Features

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

Optional Accessories

- Integrated pointer laser and power meter
- Integrated NTC temperature sensor
- Fiber detection sensor



Device Specification

Optical Parameters ¹	Units			
Center Wavelength Range ³	nm		9xx	
Center Wavelength Tolerance	nm		±3	
Output Power ²	W	300	400	500
Spectral Width (FWHM)	nm		<4	
Slope Efficiency	W/A	>7	>8	>10
Wavelength Temp. Coefficient	nm/°C		~0.34	

Fiber Parameters

Numerical Aperture	NA		0.22	
Fiber Core Diameter	µm		400	
Fiber Connector			QBH/HighYAG	

Electrical Parameters¹

Power Conversion Efficiency	%		>45	
Threshold Current (I_{TH})	A		<7.5	
Operating Current (I_{OP})	A		<60	
Operating Voltage (V_{OP})	V	<16	<20	<24

Thermal Parameters

Operating Temperature ^{2, 3, 4} (Cooling Plate)	°C		+20 to +25	
Operating Temperature ^{2, 3, 4} (Diode Laser Module)	°C		+30 to +35	
Storage Temperature ^{3, 4}	°C		0 to +55	
Coolant Flow Rate	l/h		250 to 400	
Operating Water Temperature	°C		+20 to +25	
Maximum Particle Size	µm		<10	
Recommended Cooling Capacity	W	>660	>800	>940

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

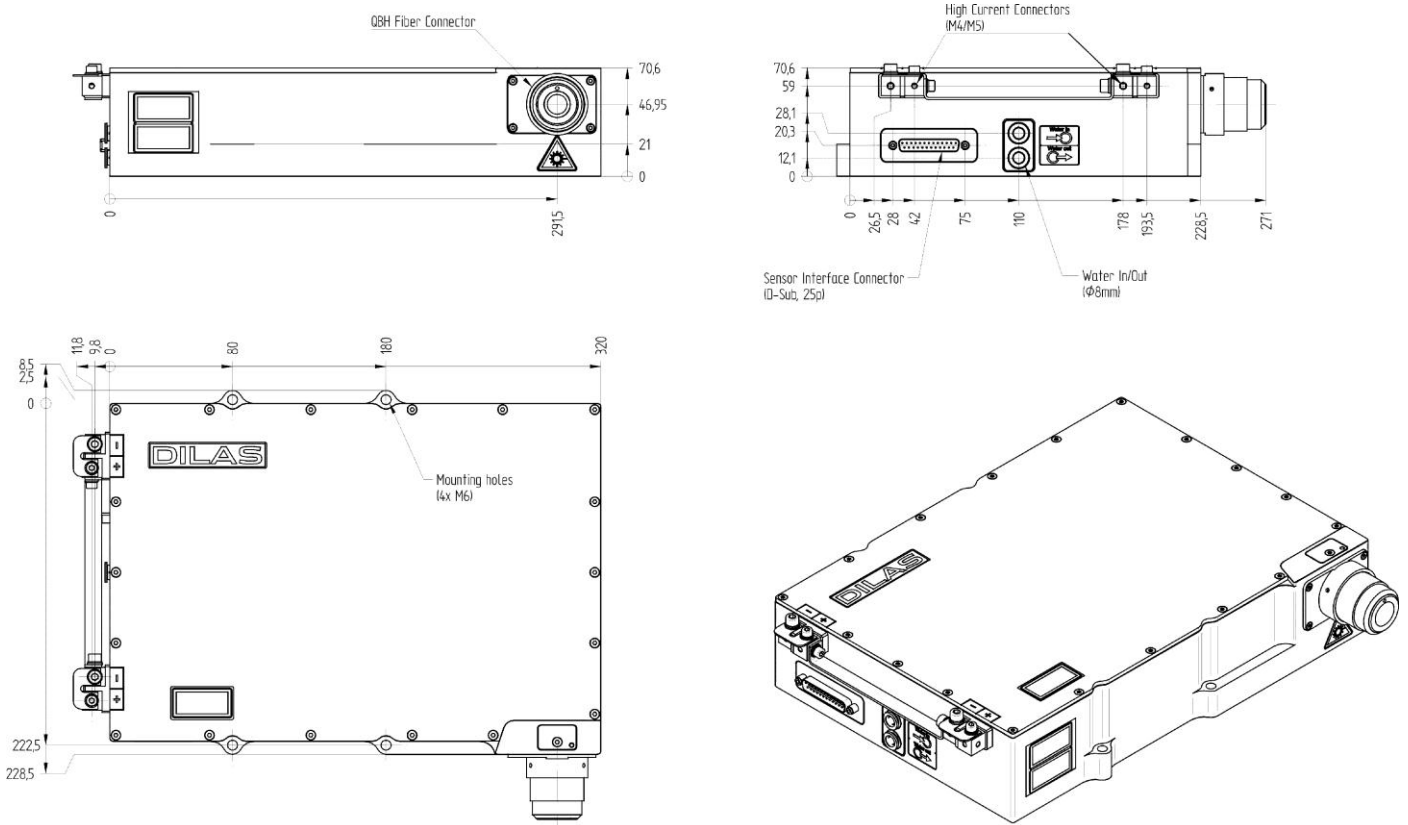
²Reduced lifetime if used above nominal operating conditions.

³Others available upon request.

⁴A non-condensing environment is required for storage and operation below the ambient dew point.

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Package Dimension



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