

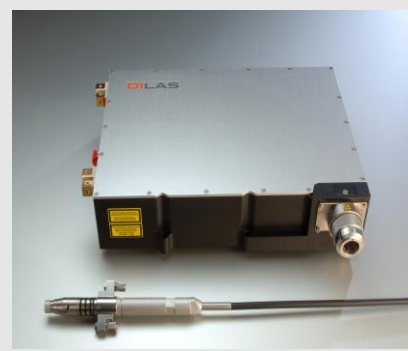
# Up to 500W, 400µm Fiber-Coupled Multi-Bar Module

## 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 detected sensor
- VBG available at 976nm with reduced output power



## Device Specification

Optical Parameters <sup>1</sup>	Units				
Center Wavelength (Range) <sup>3</sup>	nm	808	9xx	9xx	9xx
Center Wavelength Tolerance	nm	±3	±3	±3	±3
Output Power <sup>1</sup>	W	300	300	400	500
Spectral Width (FWHM)	nm	<4	<4	<4	<4
Slope Efficiency	W/A	>6	>8	>8	>10
Wavelength Temp. Coefficient <sup>2</sup>	nm/°C	~0.27	~0.34	~0.34	~0.34

## Fiber Parameters

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

## Electrical Parameters<sup>1</sup>

Power Conversion Efficiency	%	>40	>45	>45	>45
Threshold Current ( $I_{TH}$ )	A	<10	<7.5	<7.5	<7.5
Operating Current ( $I_{OP}$ )	A	<60	<60	<60	<60
Operating Voltage ( $V_{OP}$ )	V	<16	<20	<20	<24

## Thermal Parameters

Operating Temperature <sup>2, 3, 4</sup>	°C	+20 to +25			
Storage Temperature	°C	0 to +55			
Flow	L/h	250 to 400			
Operating Water Temperature	°C	+20 to +25			
Purity	µm	10			
Recommended Cooling Capacity	W	>660	>800	>800	>940

<sup>1</sup>Data at 20°C cold plate temperature, unless otherwise stated.

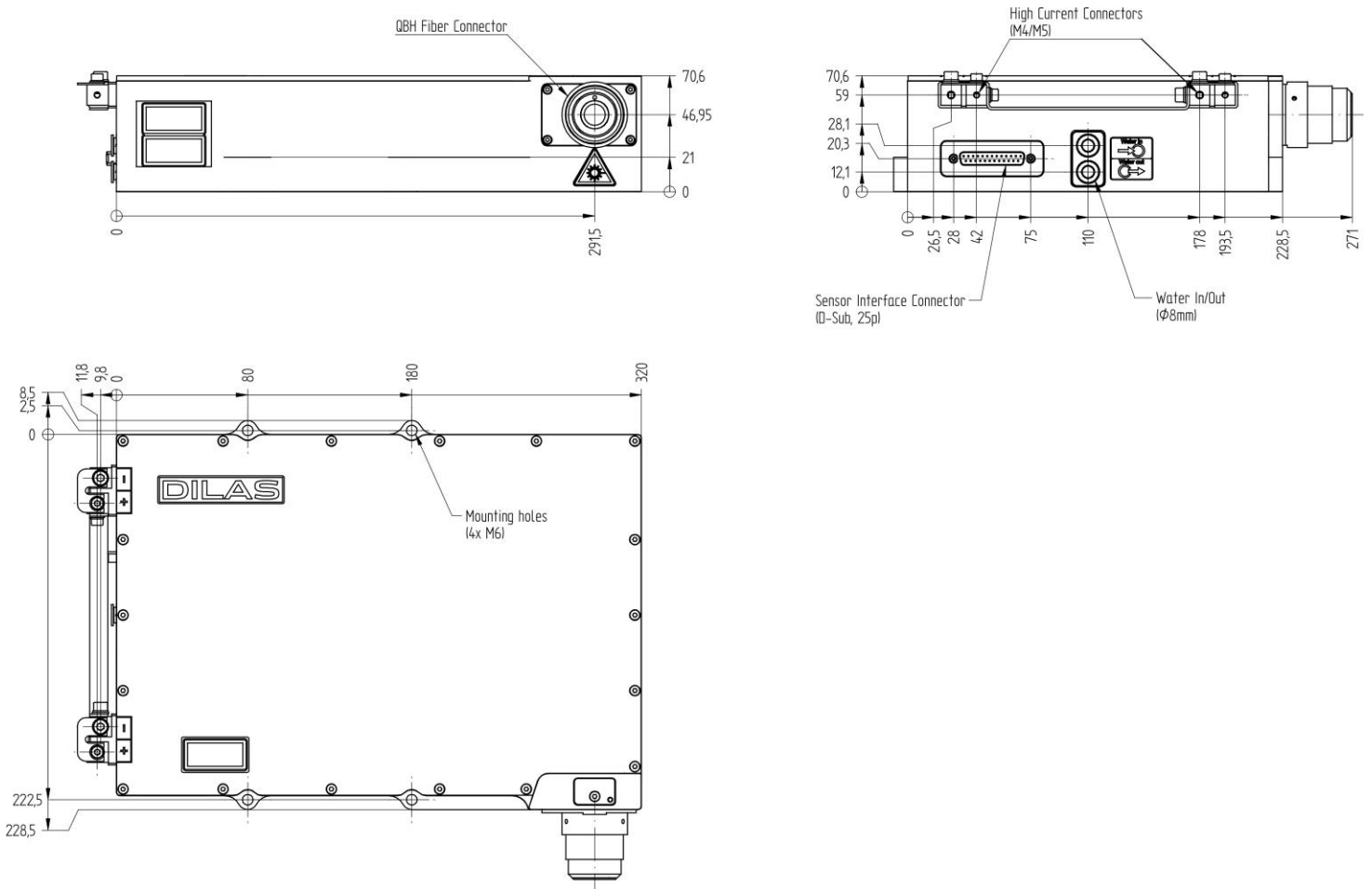
<sup>2</sup>Reduced lifetime if used above nominal operating conditions.

<sup>3</sup>Others available upon request.

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

# Up to 500W, 400µm Fiber-Coupled Multi-Bar Module

## Package Dimension



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