

# 793nm, 200 $\mu$ m, 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 <sup>1</sup>      | Units            |             |
|--------------------------------------|------------------|-------------|
| Center Wavelength Range <sup>3</sup> | nm               | 793         |
| Center Wavelength Tolerance          | nm               | $\pm 3$     |
| Output Power <sup>2</sup>            | W                | 300         |
| Spectral Width (FWHM)                | nm               | <4          |
| Slope Efficiency                     | W/A              | >6          |
| Wavelength Temp. Coefficient         | nm/ $^{\circ}$ C | $\sim 0.27$ |

| Fiber Parameters    |         |      |
|---------------------|---------|------|
| Numerical Aperture  | NA      | 0.22 |
| Fiber Core Diameter | $\mu$ m | 200  |
| Fiber Connector     |         | QBH  |

| Electrical Parameters <sup>1</sup> |   |     |
|------------------------------------|---|-----|
| Power Conversion Efficiency        | % | >35 |
| Threshold Current ( $I_{TH}$ )     | A | <9  |
| Operating Current ( $I_{OP}$ )     | A | <60 |
| Operating Voltage ( $V_{OP}$ )     | V | <16 |

| Thermal Parameters  |              |            |
|---|--------------|------------|
| Operating Temperature <sup>2, 3, 4</sup> (Cooling Plate)      | $^{\circ}$ C | +20 to +25 |
| Operating Temperature <sup>2, 3, 4</sup> (Diode Laser Module) | $^{\circ}$ C | +30 to +35 |
| Storage Temperature <sup>3, 4</sup>                           | $^{\circ}$ C | 0 to +55   |
| Coolant Flow Rate   | l/h          | 250 to 400 |
| Operating Water Temperature                                   | $^{\circ}$ C | +20 to +25 |
| Maximum Particle Size   | $\mu$ m      | <10        |
| Recommended Cooling Capacity                                  | W            | >660       |

<sup>1</sup>Data at 20 $^{\circ}$ C cold plate temperature, unless otherwise stated.

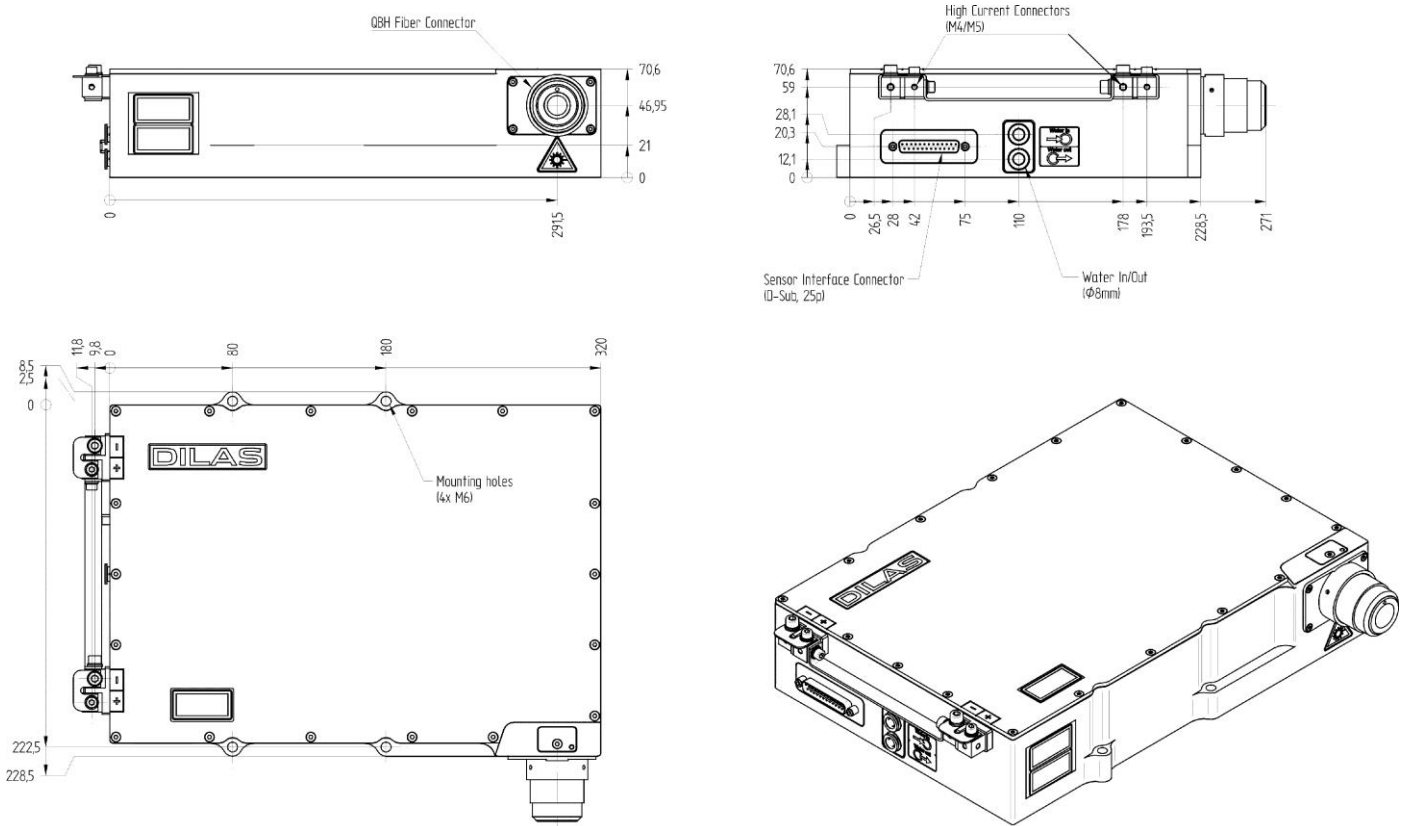
<sup>2</sup>Reduced lifetime if used above nominal operating conditions.

<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.

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## Package Dimension



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