

# 1200W, 976nm, Fiber-Coupled, Conduction-Cooled, Tailored 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 plug control
- Wavelength stabilization



## Device Specification

| Optical Parameters <sup>1</sup>      |       | Units       |
|--------------------------------------|-------|-------------|
| Center Wavelength <sup>2</sup>       | nm    | 976         |
| Wavelength Tolerance                 | nm    | ±2          |
| Output Power <sup>3</sup>            | W     | 1200        |
| Spectral Width (FWHM)                | nm    | <6          |
| Slope Efficiency                     | W/A   | >40         |
| Wavelength Temperature Coefficient   | nm/°C | 0.38        |
| Fiber Parameters                     |       |             |
| Fiber Core Diameter                  | µm    | 300         |
| Numerical Aperture                   | NA    | 0.22        |
| Fiber Connector <sup>4</sup>         |       | QBH         |
| Electrical Parameters <sup>1</sup>   |       |             |
| Power Conversion Efficiency          | %     | >43         |
| Threshold Current (I <sub>TH</sub> ) | A     | <3.5        |
| Operating Current (I <sub>OP</sub> ) | A     | <40         |
| Operating Voltage (U <sub>OP</sub> ) | V     | <100        |
| Thermal Parameters                   |       |             |
| Operating Temperature <sup>2,5</sup> | °C    | +20 to +25  |
| Storage Temperature                  | °C    | +5 to +60   |
| Coolant Flow Rate                    | l/h   | 1200        |
| Water Temperature                    | °C    | +20 to +25  |
| Purity                               |       | Tap Water   |
| Mechanical Parameters                |       |             |
| Size                                 |       | See Drawing |
| Weight                               | kg    | ~18         |

<sup>1</sup>Data at 25°C cold water temperature, unless otherwise stated.

<sup>2</sup>Others available upon request.

<sup>3</sup>Reduced lifetime if used above nominal operating conditions.

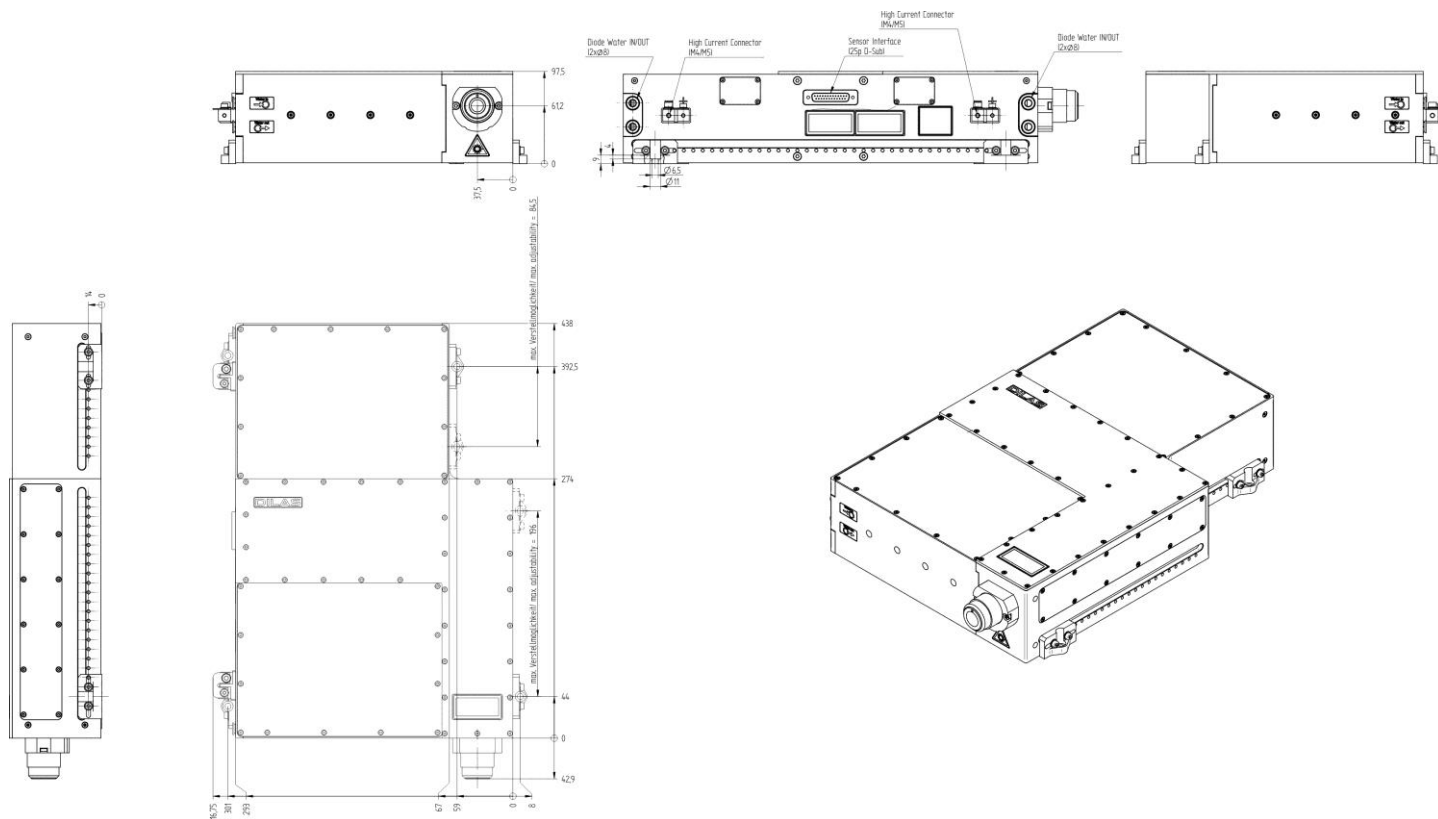
<sup>4</sup>For water cooling specifications of the fiber refer to QBH fiber manual.

<sup>5</sup>A non-condensing environment is required for storage and operation.

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**DILAS**  
The diode laser company.

## Package Dimension



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