

# 976nm, 250W, 200µm Ø, Fiber-Coupled, Multi-Bar Module Based Conduction-Cooled, Tailored Mini-Bars

**DILAS**  
The diode laser company.

## Features

- Conduction-cooled diode laser bars
- Single wavelength
- High coupling efficiency
- Scalable output power
- Back reflection filter
- mode strip fiber

## Optional Accessories

- Wavelength stabilization



## Device Specification

| Optical Parameters <sup>1</sup>      |     | Units               |
|--------------------------------------|-----|---------------------|
| Center Wavelength <sup>2</sup>       | nm  | 976                 |
| Wavelength Tolerance                 | nm  | ±3                  |
| Output Power <sup>3</sup>            | W   | 250                 |
| Spectral Width (FWHM)                | nm  | <5                  |
| Slope Efficiency                     | W/A | >7.5                |
| Fiber Parameters                     |     |                     |
| Fiber Connector                      |     | Fixed Pigtail Fiber |
| Fiber Core Diameter                  | µm  | 200/240 (Modestrip) |
| Numerical Aperture                   | NA  | 0.22                |
| Electrical Parameters <sup>1</sup>   |     |                     |
| Power Conversion Efficiency          | %   | >49                 |
| Threshold Current (I <sub>TH</sub> ) | A   | <3                  |
| Operating Current (I <sub>OP</sub> ) | A   | <40                 |
| Operating Voltage (U <sub>OP</sub> ) | V   | <15                 |
| Thermal Parameters <sup>4</sup>      |     |                     |
| Operating Temperature <sup>3</sup>   | °C  | +20 to +25          |
| Storage Temperature <sup>4</sup>     | °C  | +5 to +60           |
| Coolant Flow Rate <sup>5</sup>       | l/h | >150                |
| Water Temperature                    | °C  | +20 to +25          |
| Purity                               |     | Tap Water           |
| Mechanical Parameters                |     |                     |
| Size                                 |     | See Drawing         |
| Weight (Without Water Manifold)      | kg  | ~1                  |

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

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

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

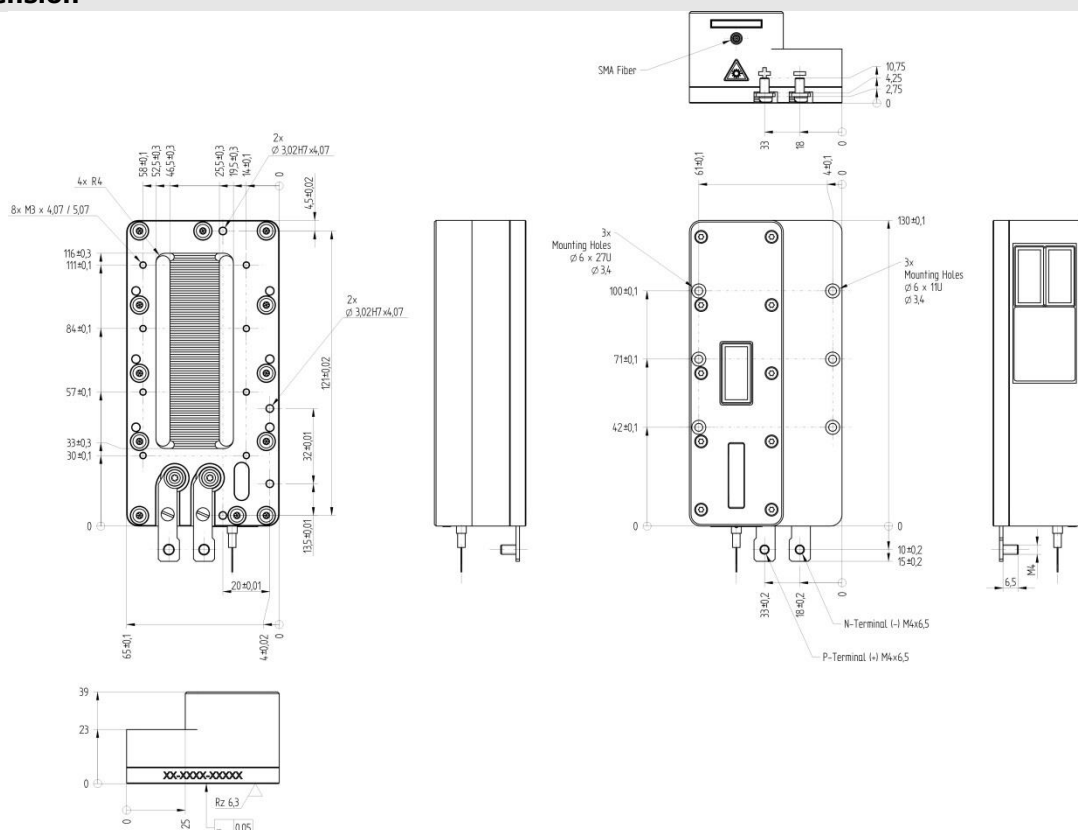
<sup>4</sup>A non-condensing environment is required for storage and operation below the ambient dew point.

<sup>5</sup>It's essential for correct functioning of the module the cooling water temperature and flow rate are monitored as an interlock for interrupting the laser current immediately if a value exceeds or falls below the given parameter.

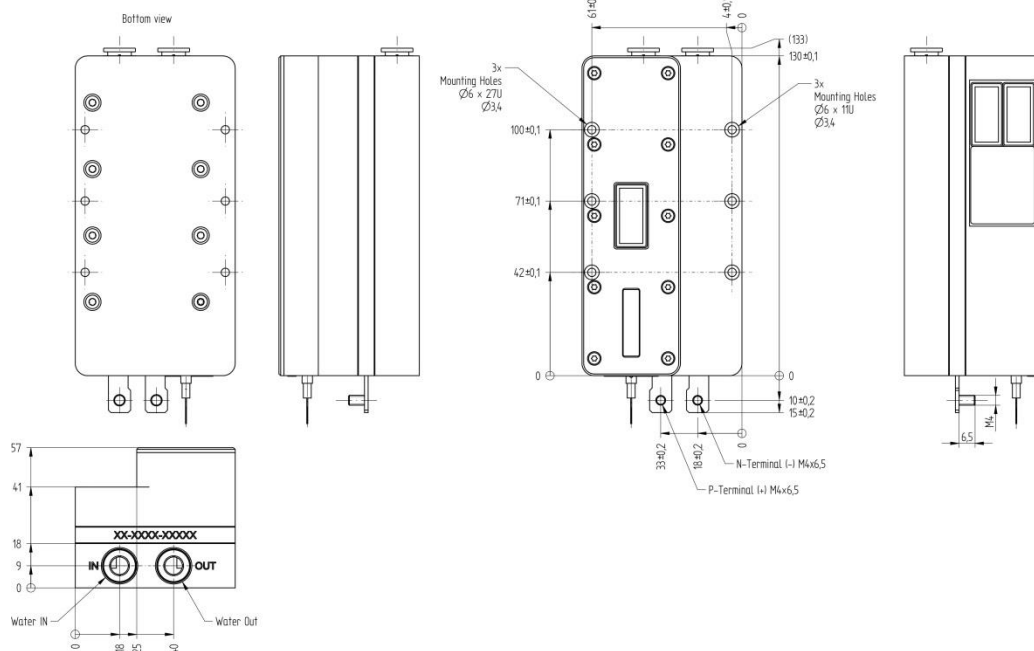
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## Package Dimension



## Water Connector Version



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