

# Conduction-Cooled, QCW, Multi-Bar Module

## Features

- QCW operation
- Single wavelength
- High coupling efficiency
- Thermal interface by stack-base-plate
- Scalable output power

## Optional Accessories

- Integrated temperature sensor
- Fiber connection control



## Device Specification

| Optical Parameters <sup>1</sup>          | Units |            |
|--|-------|------------|
| Wavelength Range                         | nm    | 790 to 980 |
| Center Wavelength Tolerance <sup>3</sup> | nm    | ±5         |
| Output Peak Power <sup>2</sup>           | W     | 500        |
| Spectral Width (FWHM)                    | nm    | <6         |
| Slope Efficiency                         | W/A   | >9         |
| Wavelength Temp. Coefficient             | nm/°C | ~0.3       |

| Fiber Parameters   |    |                                   |
|--------------------|----|-----------------------------------|
| Numerical Aperture | NA | 0.22                              |
| Fiber Core         | µm | 800                               |
| Fiber Connector    |    | SMA with Free Standing Fiber Tips |

| Electrical Parameters <sup>1</sup>     |   |     |
|--|---|-----|
| Power Conversion Efficiency            | % | >40 |
| Threshold Current ( $I_{TH}$ )         | A | <15 |
| Maximum Operating Current ( $I_{OP}$ ) | A | <80 |
| Operating Voltage ( $V_{OP}$ )         | V | <20 |
| Duty Cycle (DC)                        | % | <2  |

| Thermal Parameters                       |     |                                   |
|--|-----|-----------------------------------|
| Operating Temperature <sup>2, 3, 4</sup> | °C  | +20 to +30                        |
| Storage Temperature <sup>3,4</sup>       | °C  | 0 to +55                          |
| Coolant Flow Rate                        | l/h | 100 to 200                        |
| Maximum Particle Size                    | µm  | <5 / Deionized Water <sup>5</sup> |
| Recommended Cooling Capacity             | W   | >30                               |

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

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

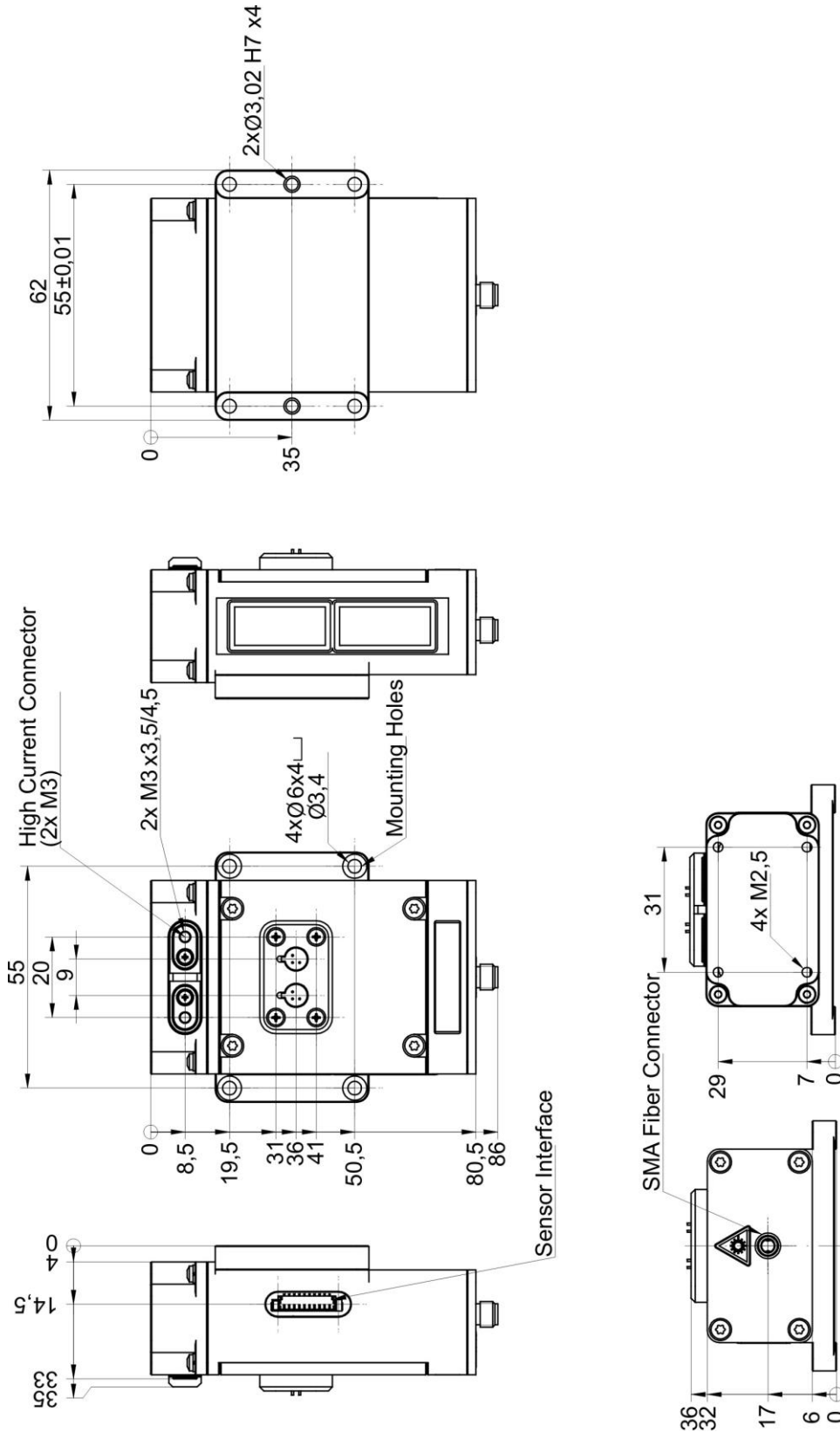
<sup>3</sup>Others available upon request.

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

<sup>5</sup>Follow DILAS cooling water specifications.

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## Package Dimension



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