

# 793nm, 200 $\mu$ m, Conduction-Cooled, Fiber-Coupled Multi-Bar Module

## Features

- Single wavelength
- High coupling efficiency
- Thermal interface by base-plate
- Scalable output power
- Straight fiber output (0°) or 90°
- User exchangeable blast shield

## Optional Accessories

- Integrated pointer laser
- Integrated monitor photo diode
- 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    | ±3    |
| Output Power <sup>2</sup>            | W     | 100   |
| Spectral Width (FWHM)                | nm    | <4    |
| Slope Efficiency                     | W/A   | >2.5  |
| Wavelength Temp. Coefficient         | nm/°C | ~0.27 |

| Fiber Parameters    |         |  |
|---------------------|---------|--|
| Numerical Aperture  | NA      | 0.22                                     |
| Fiber Core Diameter | $\mu$ m | 200                                      |
| Fiber Connector     |         | HP-SMA 905 with Free Standing Fiber Tips |

| 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 | <6  |

| Thermal Parameters  |         |            |
|---|---------|------------|
| Operating Temperature <sup>2, 3, 4</sup> (Cooling Plate)      | °C      | +20 to +25 |
| Operating Temperature <sup>2, 3, 4</sup> (Diode Laser Module) | °C      | +30 to +35 |
| Storage Temperature <sup>3, 4</sup>                           | °C      | 0 to +55   |
| Coolant Flow Rate   | l/h     | 200 to 300 |
| Operating Water Temperature                                   | °C      | +20 to +25 |
| Maximum Particle Size   | $\mu$ m | <10        |
| Recommended Cooling Capacity                                  | W       | >260       |

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

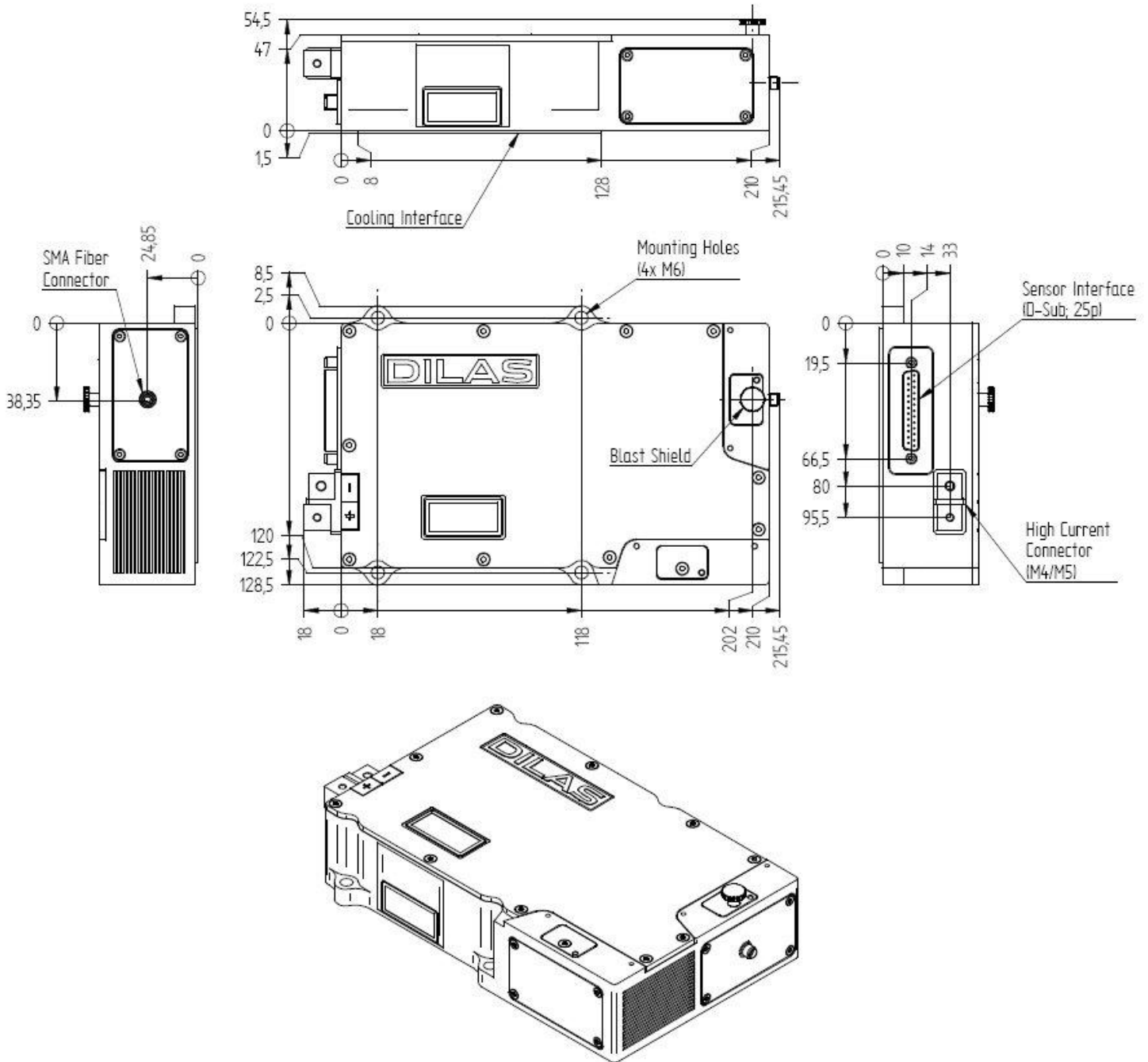
<sup>2</sup>Reduced lifetime if used above nominal operating conditions.

<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.

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## Package Dimension



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