

# 940nm, Water-Cooled, Both Axis, Collimated Vertical Diode Laser Stack

## Features

- Collimated beam
- Very low divergence in fast axis and slow axis
- Sealed housing



## Device Specification

### Optical Parameters<sup>1</sup>

|                                          |       |        |
|------------------------------------------|-------|--------|
| Center Wavelength Range <sup>3</sup>     | nm    | 940    |
| Center Wavelength Tolerance <sup>3</sup> | nm    | ±5     |
| Output Power per Bar <sup>2</sup>        | W     | 40     |
| Number of Bars                           | #     | 1 to 5 |
| Spectral Width (FWHM)                    | nm    | <5     |
| Slope Efficiency per Bar                 | W/A   | >0.75  |
| Fast-Axis Divergence                     | mrاد  | 10     |
| Slow-Axis Divergence                     | mrاد  | 30     |
| Wavelength Temp. Coefficient             | nm/°C | ~0.31  |

### Electrical Parameters<sup>1</sup>

|                                        |   |      |
|----------------------------------------|---|------|
| Power Conversion Efficiency            | % | >40  |
| Threshold Current ( $I_{TH}$ )         | A | <13  |
| Operating Current ( $I_{OP}$ )         | A | 55   |
| Operating Voltage per Bar ( $V_{OP}$ ) | V | <1.8 |

### Thermal Parameters

|                                          |    |           |
|------------------------------------------|----|-----------|
| Operating Temperature Range <sup>3</sup> | °C | +20 to 30 |
| Storage Temperature Range <sup>4</sup>   | °C | 0 to 55   |

**Please refer to DILAS water specification for cooling requirements**

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

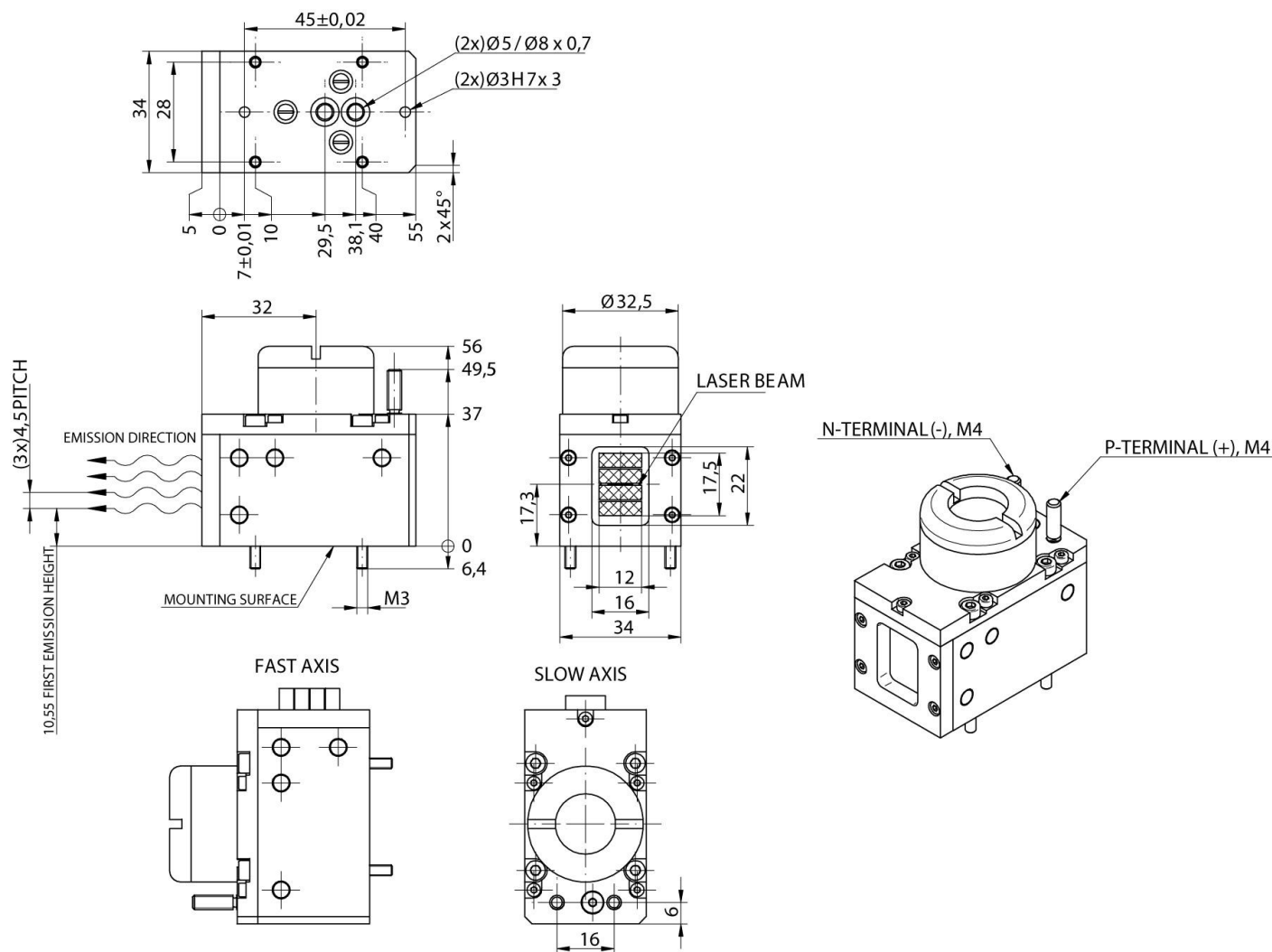
<sup>2</sup>Reduced lifetime if used above nominal operating conditions.

<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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**Europe**  
**DILAS Diodenlaser GmbH**  
Galileo-Galilei-Straße 10  
55129 Mainz  
Germany  
Phone: +49 (6131) 9226 0  
Fax: +49 (6131) 9226 257  
Email: [sales@DILAS.de](mailto:sales@DILAS.de)

**North America**  
**DILAS Diode Laser, Inc.**  
9070 South Rita Road  
Suite 1500  
Tucson, AZ 85747  
Phone: +1 (520) 232-3484  
Fax: +1 (520) 232-3499  
Email: [sales@DILAS-INC.com](mailto:sales@DILAS-INC.com)

**Asia**  
**DILAS Diodenlaser GmbH**  
China Sales Office  
Room 206, Sunplus Technology, Bldg. 2  
No. 1077 Zu Chongzhi Road  
Hi-Tech Park, Shanghai 201203,  
P.R. China  
Phone: +86 (0) 21-6855-2216  
Fax: +86 (0) 21-5027-3793  
Email: [sales@dilas-china.com.cn](mailto:sales@dilas-china.com.cn)