

# 981nm, Conduction-Cooled Single Bar, Narrow Linewidth, Fiber-Coupled Module

## Features

- Narrow linewidth of <math><0.5\text{nm}</math>
- High coupling efficiency
- High brightness
- Conduction-cooled
- Sealed housing
- Standard fiber coupling (HP-SMA) for 200 $\mu\text{m}$  and 400 $\mu\text{m}$ , NA 0.22

## Optional Accessories

- Monitor photo diode



## Device Specification

Optical Parameters <sup>1</sup>	Units		
Center Wavelength Range <sup>3</sup>	nm		981
Center Wavelength Tolerance	nm		$\pm 0.6$
Output Power <sup>2</sup>	W	30	40
Spectral Width (FWHM)	nm		<math><0.5</math>
Slope Efficiency	W/A	>0.5	>0.5
Wavelength Temp. Coefficient	nm/ $^{\circ}\text{C}$		$\sim 0.01^5$

Fiber Parameters			
Numerical Aperture	NA		0.22
Fiber Core Diameter	$\mu\text{m}$	200	400
Fiber Connector		HP-SMA 905 with Free Standing Fiber Tips	

Electrical Parameters <sup>1</sup>			
Power Conversion Efficiency	%	>35	>35
Threshold Current ( $I_{\text{TH}}$ )	A	<7.5	<7.5
Operating Current ( $I_{\text{OP}}$ )	A	<55	<70
Operating Voltage per Bar ( $V_{\text{OP}}$ )	V		<1.9

Thermal Parameters			
Operating Temperature <sup>3, 4</sup>	$^{\circ}\text{C}$		+20 to +30
Storage Temperature <sup>4</sup>	$^{\circ}\text{C}$		0 to +55
Recommended Heatsink Capacity	W	>80	>100

<sup>1</sup>Data at 25 $^{\circ}\text{C}$  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.

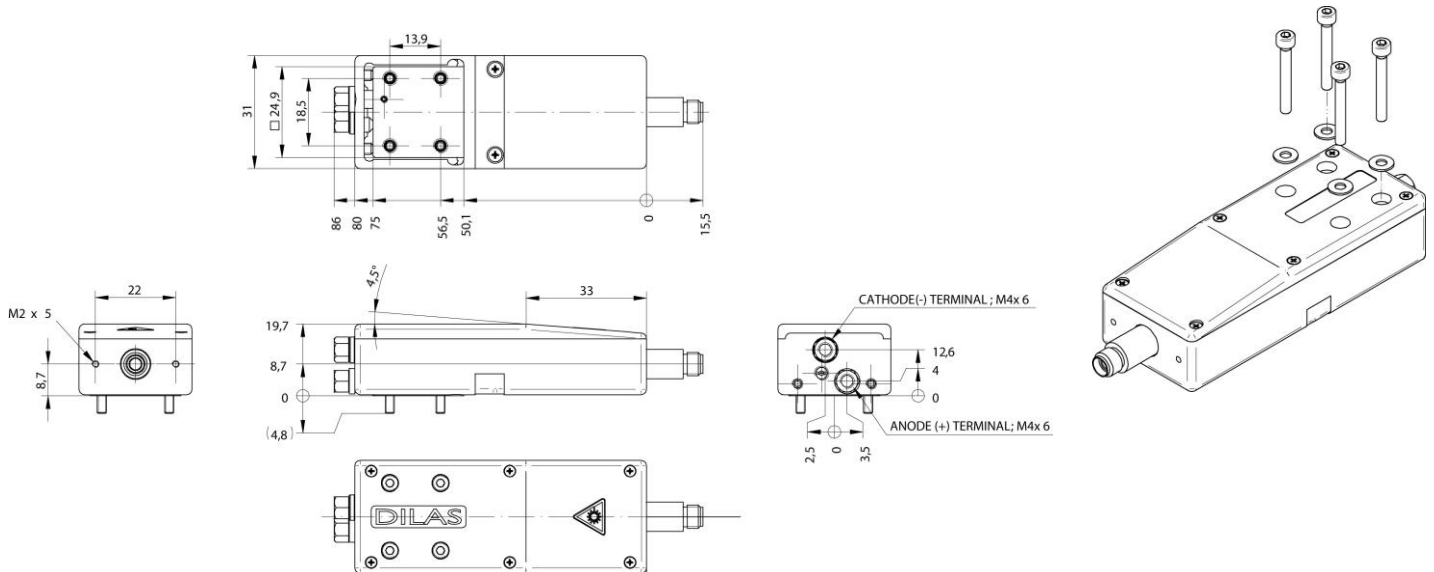
<sup>5</sup>Within operating temperature  $\pm 3^{\circ}\text{C}$ .

# 981nm, Conduction-Cooled Single Bar, Narrow Linewidth, Fiber-Coupled Module

**DILAS**  
The diode laser company.

## Package Dimension

### Module M1F-SS2.4



©2012 DILAS. All rights reserved. DILAS reserves the right to change products specifications without notice. For handling precautions, please reference the general handling instruction manual.

For complete details, please contact your local DILAS sales representative or visit our website at [www.DILAS.com](http://www.DILAS.com).

**Europe**  
**DILAS Diodenlaser GmbH**  
Galileo-Galilei-Straße 10  
55129 Mainz  
Germany  
Phone: +49 (0)6131 9226 0  
Fax: +49 (0)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) 232-3480  
Fax: +1 (520) 232-3499  
Email: [sales@DILAS-INC.com](mailto:sales@DILAS-INC.com)

**China & Taiwan**  
**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)