

# 976nm, 400µm, Conduction-Cooled, Single Bar, Fiber-Coupled Module

## Features

- High coupling efficiency
- High brightness
- Sealed housing
- Standard fiber coupling (HP-SMA) for 400µm NA 0.22



## Device Specification

Optical Parameters <sup>1</sup>	Units			QCW
Center Wavelength Range <sup>3</sup>	nm	976	976	976
Center Wavelength Tolerance	nm	±3	±3	±5
Output Power <sup>2</sup>	W	30	50	100 <sup>5</sup>
Spectral Width (FWHM)	nm	4	4	5
Slope Efficiency	W/A	>0.8	>0.8	>0.85
Wavelength Temp. Coefficient	nm/°C	~0.38	~0.38	~0.38

## Fiber Parameters

Numerical Aperture <sup>6</sup>	NA	0.22
Fiber Core Diameter	µm	400
Fiber Connector	HP-SMA 905 with Free Standing Fiber Tips	

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

Power Conversion Efficiency	%	>45	>45	≥40
Threshold Current (I <sub>TH</sub> )	A	<7.5	<13	<7.5
Operating Current (I <sub>OP</sub> )	A	<50	<60	<120
Operating Voltage (V <sub>OP</sub> )	V	<1.9	<1.9	<1.9

## Thermal Parameters

Operating Temperature <sup>3, 4</sup>	°C	+20 to +30	+20 to +35	+20 to +30
Storage Temperature <sup>4</sup>	°C	0 to +55	0 to +55	0 to +55
Recommended Heatsink Capacity	W	>70	≥90	>70

## Optional

True unpolarized output is available as an option.

<sup>1</sup>Data at 25°C cold plate temperature.

<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>QCW, 1msec 10Hz.

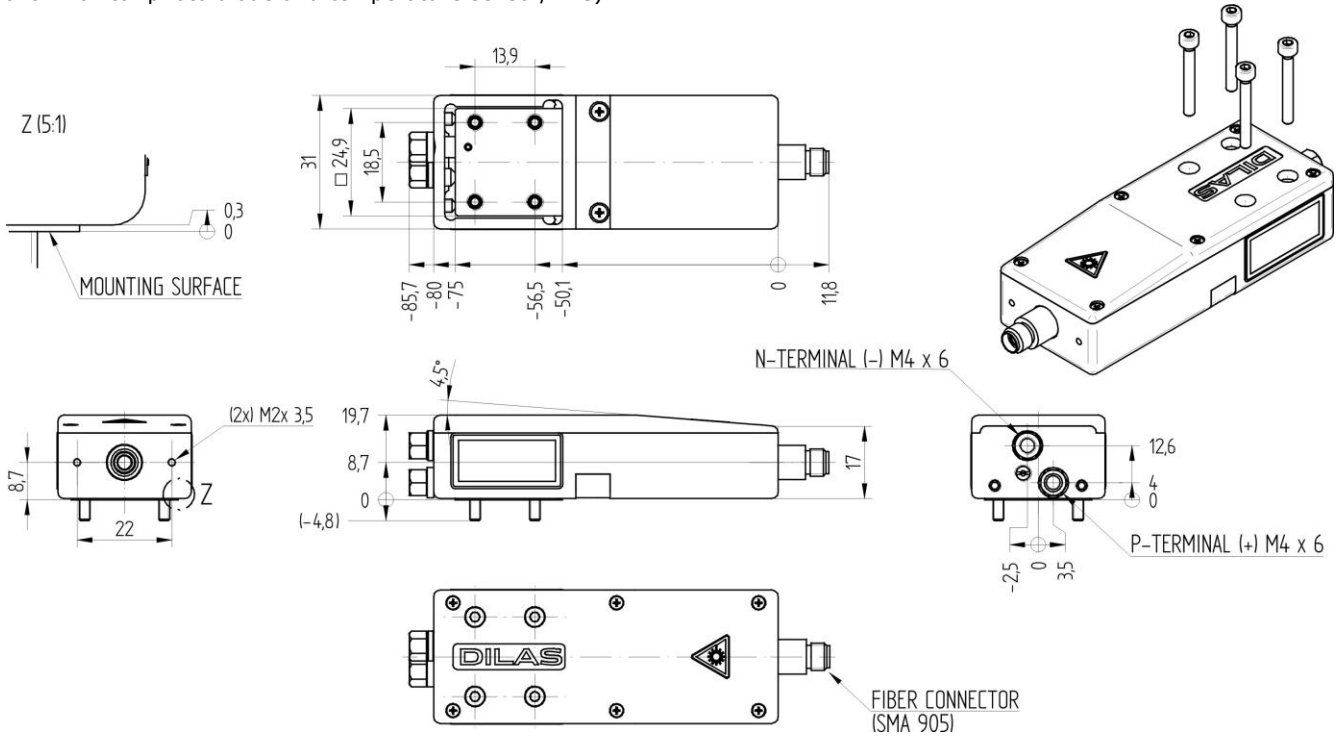
<sup>6</sup>Low numerical aperture option available at 0.12 for 800µm.

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## Package Dimension

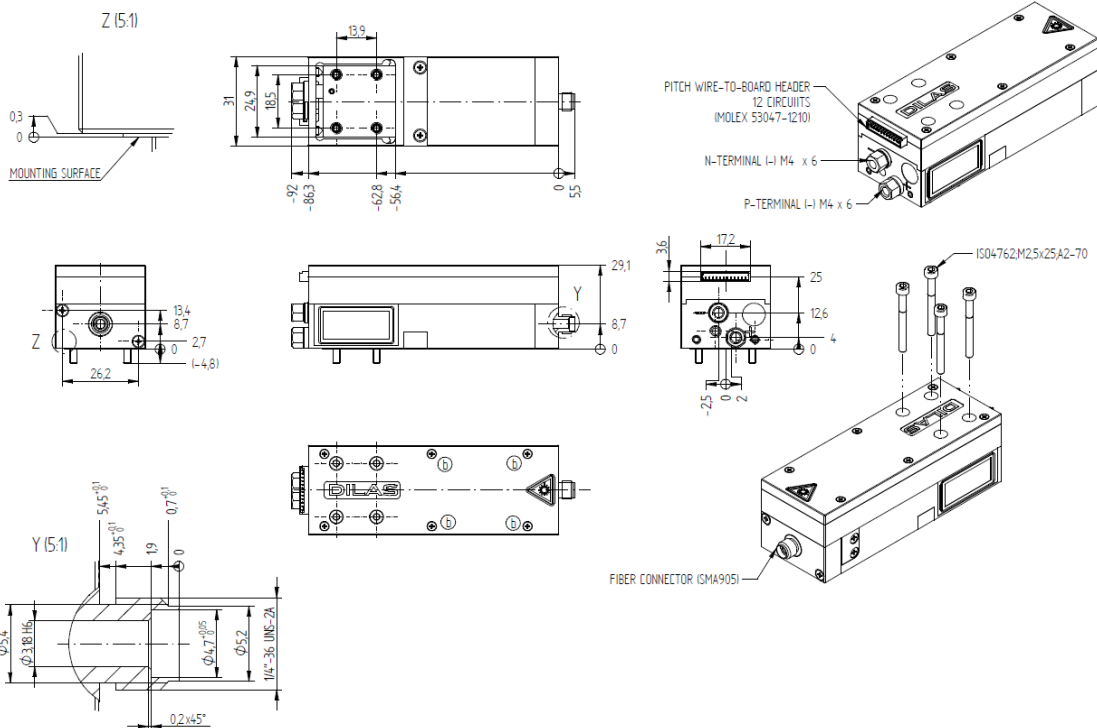
### Module M1F-SS2.1

(Optional monitor photo diode and temperature sensor/NTC)



### Module M1F-SS5.2

(Includes pointer, monitor photo diode, temperature sensor/NTC and fiber interlock)



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