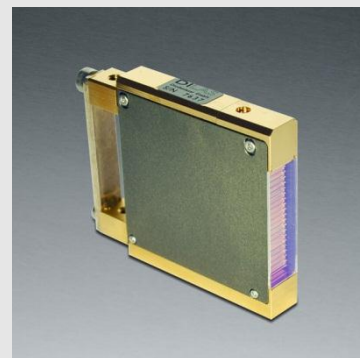


780nm, Water-Cooled, Vertical Diode Laser Stack

Features

- Uniform divergence
- Low thermal resistance CW operation
- Customized geometries and housings available
- Optional standard coatings or customized low AR coatings are available
- Optional FAC/SAC are available
- Optional Volume Bragg Grating are available (to ensure that very little pump energy is wasted)



Device Specification

Optical Parameters ¹	Units	
Center Wavelength Range ³	nm	780
Center Wavelength Tolerance ³	nm	±3
Output Power per Bar ²	W	50
Number of Bars ³	#	20
Bar-to-Bar Spacing ³	mm	Approx. 1.8
Spectral Width (FWHM) ⁶	nm	<5
Slope Efficiency per Bar	W/A	>1.25
Fast-Axis Divergence ⁴ (90%)	degrees	<60
Slow-Axis Divergence (95%)	degrees	<8

Electrical Parameters ¹		
Power Conversion Efficiency	%	>58
Threshold Current (I_{TH})	A	<7.5
Operating Current (I_{OP})	A	≤50
Operating Voltage per Bar (V_{OP})	V	<1.9

Thermal Parameters		
Operating Temperature Range ^{3, 5}	°C	+20 to 30
Storage Temperature Range ⁵	°C	0 to 55

Please refer to DILAS water specification for cooling requirements.

¹Data at 25°C water temperature, unless otherwise stated.

²Reduced lifetime if used above nominal operating conditions.

³Others available upon request.

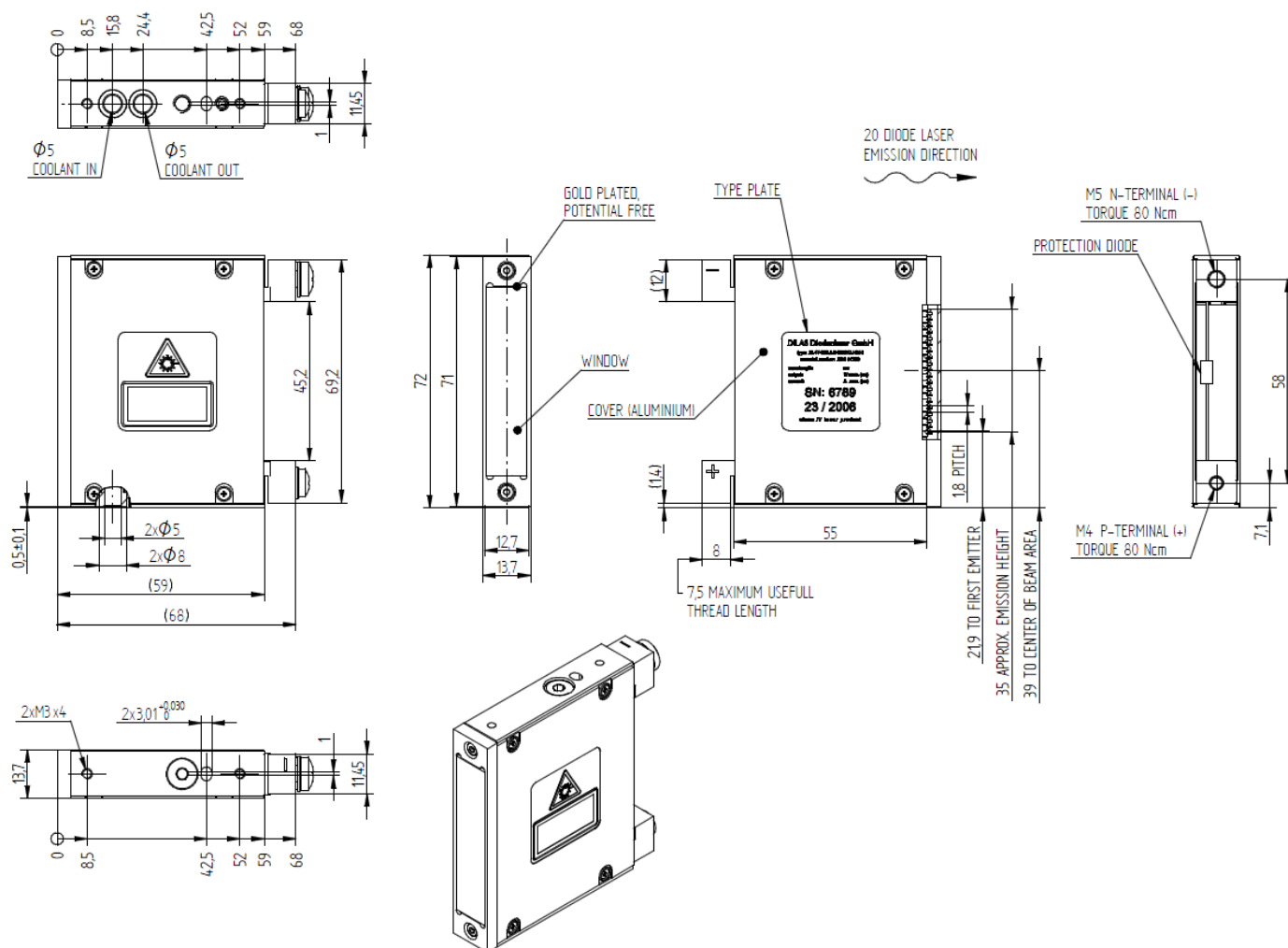
⁴For fast-axis collimation using FAC lens: divergence <8mrad.

⁵A non-condensing environment is required for storage and operation below the ambient dew point.

⁶With volume Bragg gratings, spectral line narrowing will result in ≤1nm FWHM per bar.

780nm, Water-Cooled, Vertical Diode Laser Stack

Package Dimension



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For complete details, please contact your local DILAS sales representative or visit our website at www.DILAS.com.

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