

808nm, Water-Cooled, Frameless Vertical Stacks

Features

- Low thermal resistance CW and QCW operation
- Available as non-collimated or fast-axis-collimated unit
- Customized geometries available
- Customized housings available
- Up to 30 bars vertically CW and QCW operation



Device Specification

Optical Parameters ¹	Units			QCW	QCW
Center Wavelength Range ³	nm			808	
Center Wavelength Tolerance ³	nm			±3	
Output Power per Bar ²	W	50	80	150 ⁴	250 ⁴
Number of Bars ³	#			1 to 30	
Bar-to-Bar Spacing ³	mm			approx. 1.9	
Spectral Width (FWHM)	nm	<3	<3	<6	<6
Slope Efficiency per Bar	W/A	>1.14	>1.14	>1.2	>1.2
Fast-Axis Divergence (90%) ⁵	degrees	<70	<70	65	65
Slow-Axis Divergence (90%) ⁶	degrees	8	8	12	12
Wavelength Temp. Coefficient	nm/°C			~0.27	
Beam Geometry after FAC Lens (n=number of bars)					10mm x 0.8mm
Electrical Parameters ¹					
Power Conversion Efficiency	%	>46	>48	>55	>58
Threshold Current (I _{TH})	A	<16	<16	<20	<30
Operating Current (I _{OP})	A	<55	<90	150	230
Operating Voltage (V _{OP})	V	<1.8	<1.8	<1.8	<1.9
Thermal Parameters					
Operating Temperature Range ³	°C			+20 to 30	
Storage Temperature Range	°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.

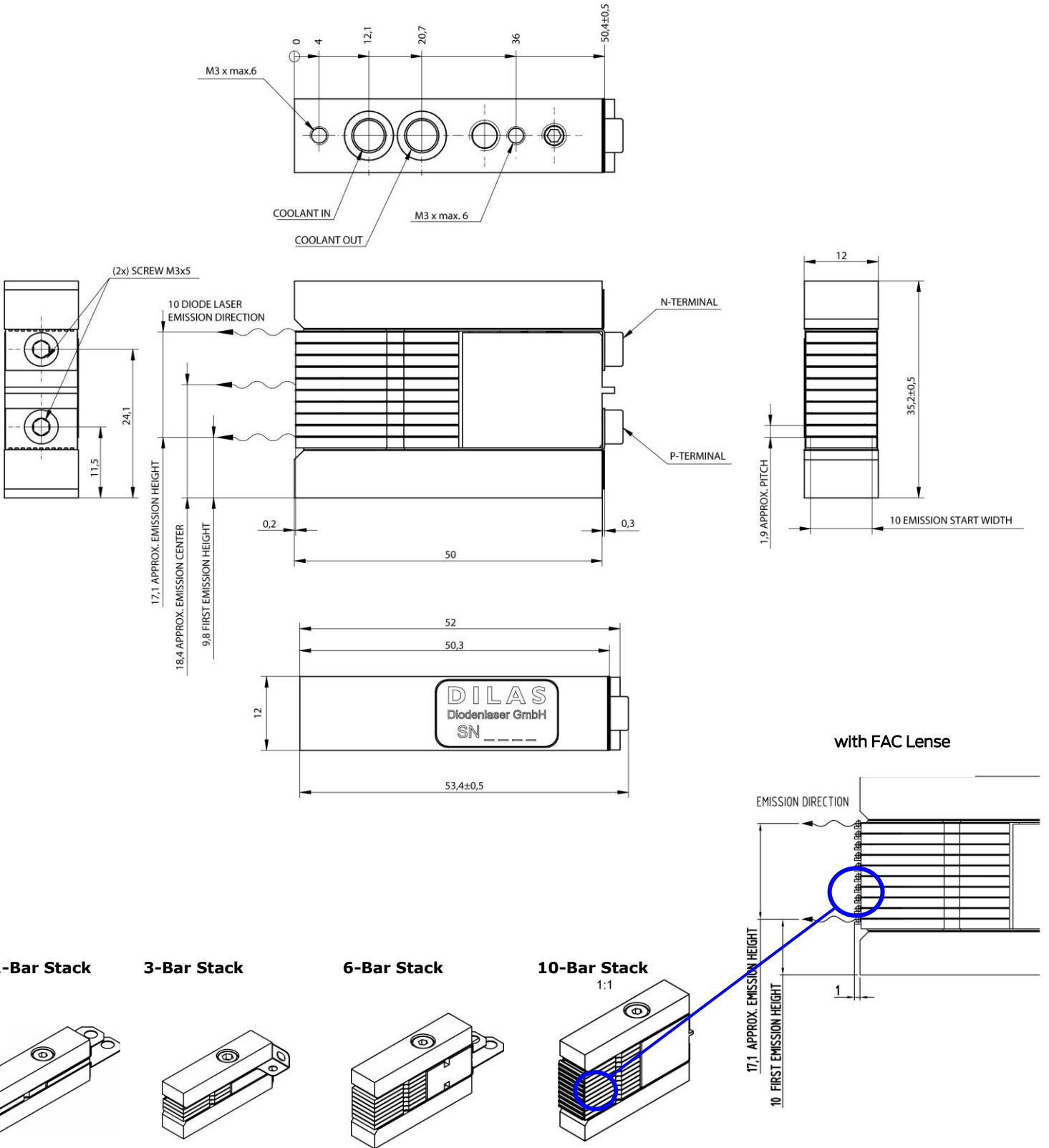
⁴QCW, <2% Duty Cycle, <500µsec.

⁵For fast-axis collimation using FAC lens: divergence <8mrad.

⁶Slow-axis lense arrays available upon request.

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Package Dimension

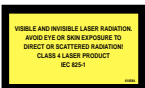
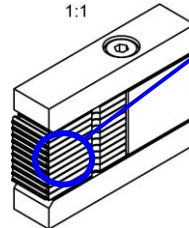
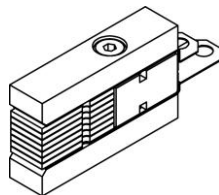
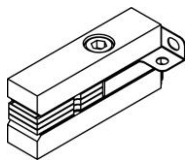
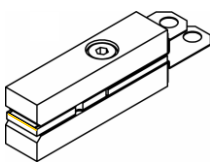


1-Bar Stack

3-Bar Stack

6-Bar Stack

10-Bar Stack



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