

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	50	W	80	150 ⁴	250 ⁴
Number of Bars ³		#	1 to 30		
Bar-to-Bar Spacing ³		mm	approx. 1.9		
Spectral Width (FWHM)	<3	nm	<3	<6	<6
Slope Efficiency per Bar	>1.14	W/A	>1.14	>1.2	>1.2
Fast-Axis Divergence (90%) ⁵	<70	degrees	<70	65	65
Slow-Axis Divergence (90%) ⁶	8	degrees	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.

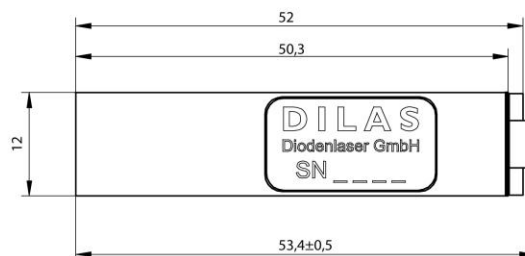
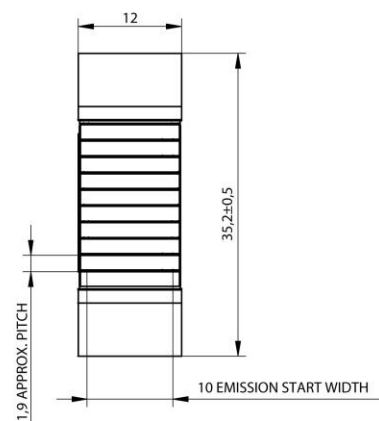
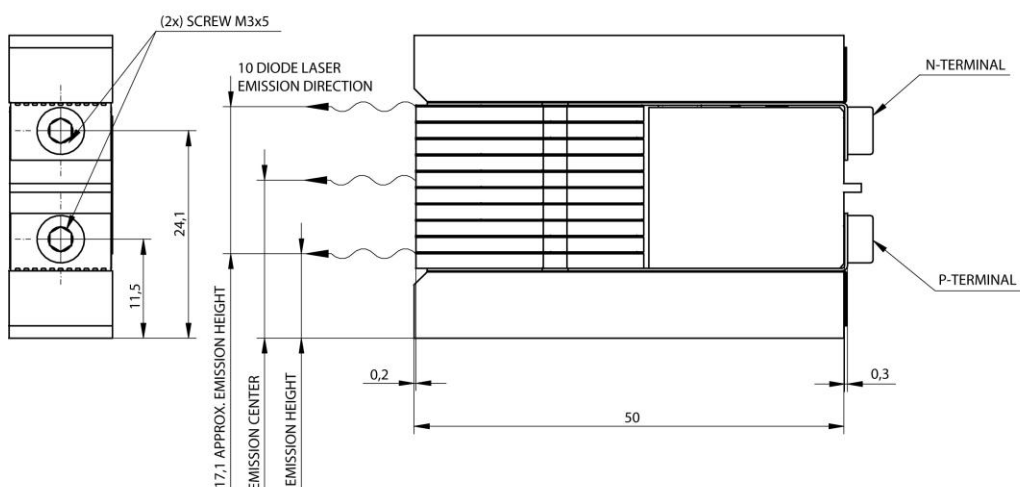
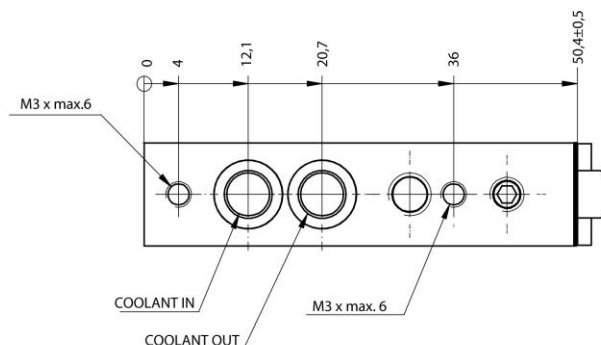
⁴QCW, <2% Duty Cycle, <500µsec.

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

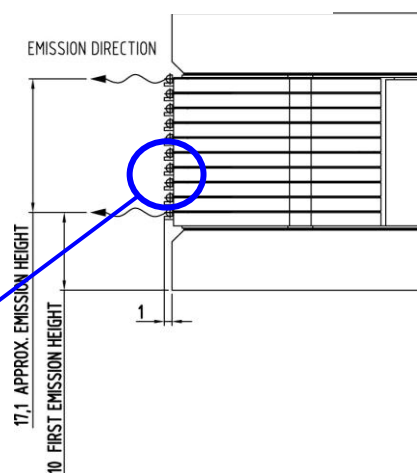
⁶Slow-axis lense arrays available upon request.

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Package Dimension



with FAC Lense

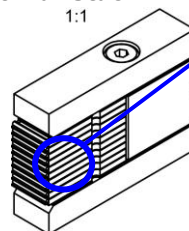
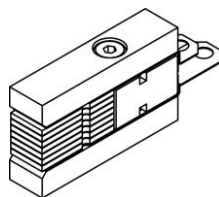
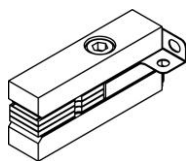
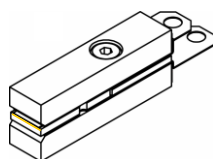


1-Bar Stack

3-Bar Stack

6-Bar Stack

10-Bar Stack



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