

808nm, Water-Cooled, Housed Vertical Stacks

Features

- Low thermal resistance
- Available as non-collimated or fast axis collimated unit
- Dust protected housings or, hermetically sealed housings are available
- Up to 70 bars vertically stacked
- CW and QCW operation



Device Specification

Optical Parameters ¹	Units	CW		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 70			
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	degree	<70	<70	65	65
Slow-Axis Divergence (90%) ⁶	degree	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 per Bar (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 cold plate temperature, unless otherwise stated.

²Reduced lifetime if used above nominal operating conditions.

³Others available upon request.

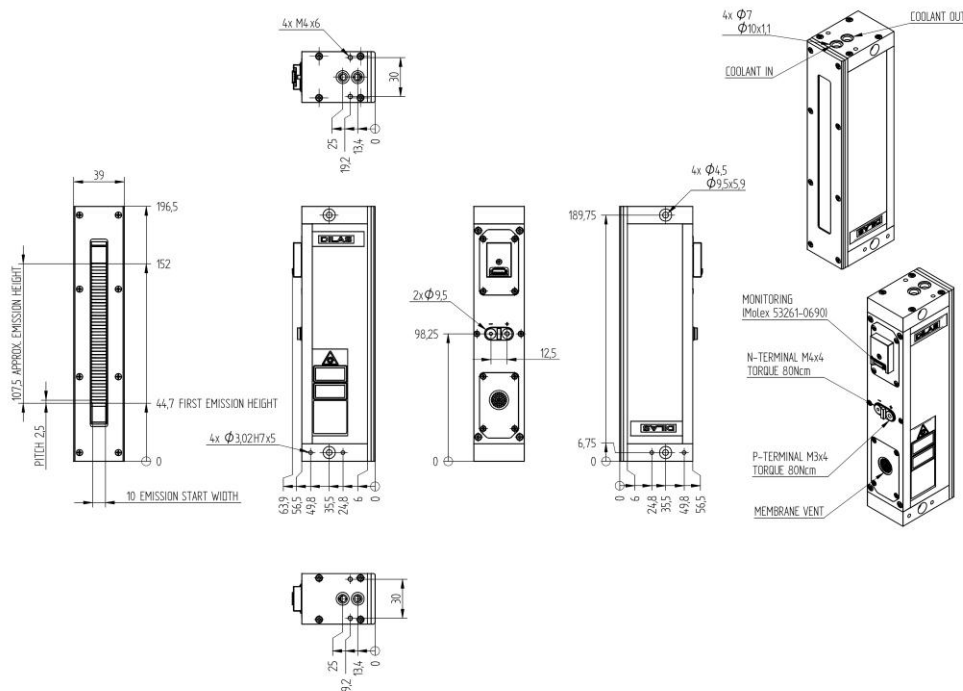
⁴QCW operation please contact DILAS.

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

⁶Slow-axis lense arrays available upon request.

DILAS
The diode laser company.

12-Bar Stack



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