

# 9xxnm, 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 <sup>1</sup>	Units		
Center Wavelength Range <sup>3</sup>	nm		9xx
Center Wavelength Tolerance <sup>3</sup>	nm		±5
Output Power per Bar <sup>2</sup>	W	50	80
Number of Bars <sup>3</sup>	#		1 to 70
Bar-to-Bar Spacing <sup>3</sup>	mm		approx. 1.9
Spectral Width (FWHM)	nm		<5
Slope Efficiency per Bar	W/A	>1.05	>1.05
Fast-Axis Divergence (90%) <sup>5</sup>	degree	<70	<70
Slow-Axis Divergence (90%) <sup>6</sup>	degree		8
Wavelength Temp. Coefficient	nm/°C		~0.27
Beam Geometry after FAC Lens (n=number of bars)			10mm x 0.8mm

Electrical Parameters <sup>1</sup>			
Power Conversion Efficiency	%		>52
Threshold Current ( $I_{TH}$ )	A	<13	<20
Operating Current ( $I_{OP}$ )	A	<60	<95
Operating Voltage per Bar ( $V_{OP}$ )	V		<1.8

Thermal Parameters		
Operating Temperature Range <sup>3</sup>	°C	+20 to 30
Storage Temperature Range	°C	0 to 55

**Please refer to DILAS water specification for cooling requirements.**

<sup>1</sup>Data at 25°C cold plate temperature, unless otherwise stated.

<sup>2</sup>Reduced lifetime if used above nominal operating conditions.

<sup>3</sup>Others available upon request.

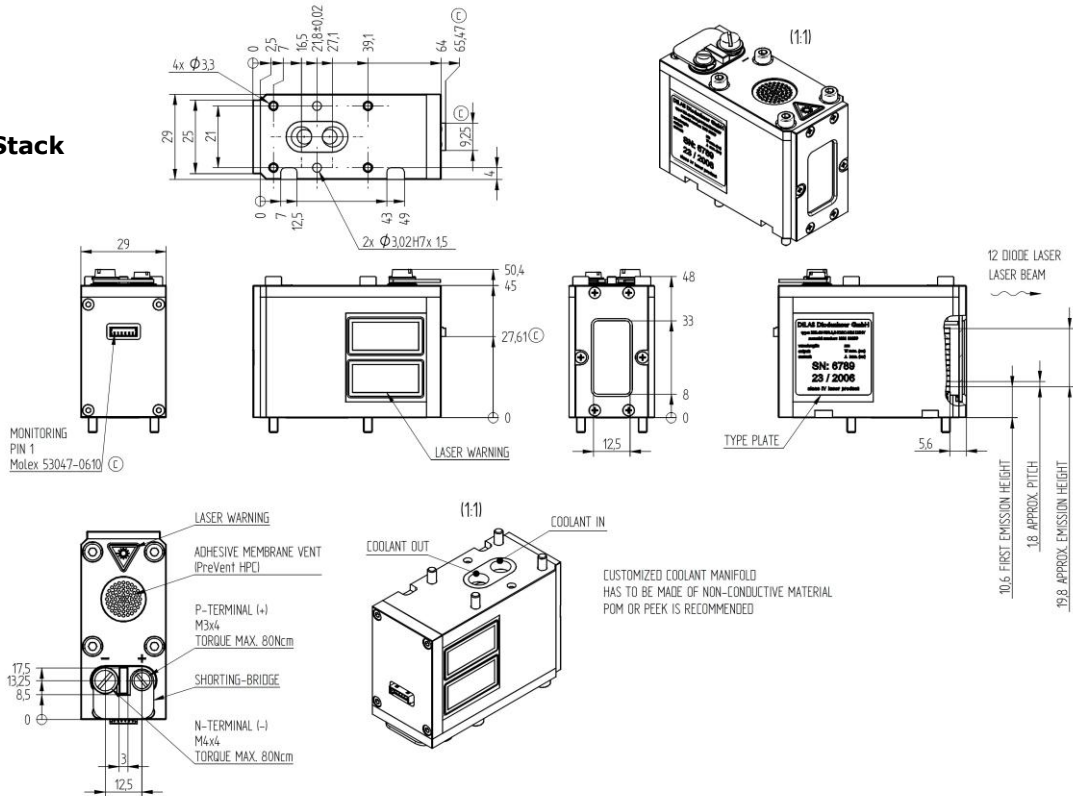
<sup>4</sup>QCW operation please contact DILAS.

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

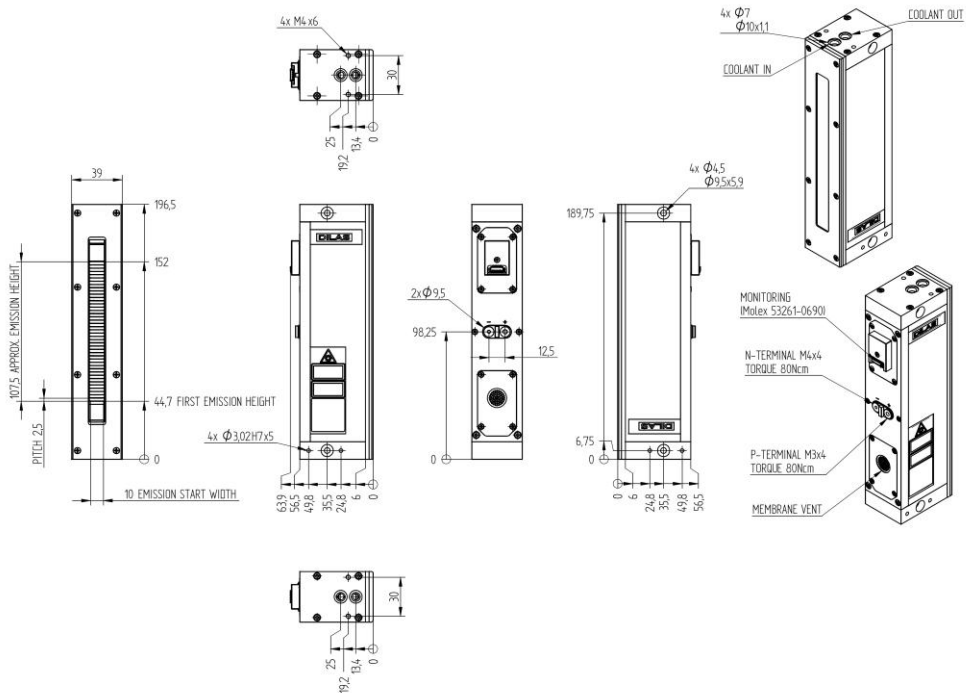
<sup>6</sup>Slow-axis lense arrays available upon request.

## Package Dimension

### 12-Bar Stack



### 44-Bar Stack



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