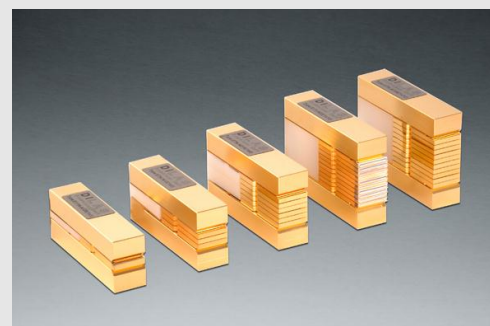


# 88xnm, Water-Cooled, Frameless Vertical Stacks

## 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 <sup>1</sup>	Units	
Center Wavelength Range <sup>3</sup>	nm	88x
Center Wavelength Tolerance <sup>3</sup>	nm	±3
Output Power per Bar <sup>2</sup>	W	80
Number of Bars <sup>3</sup>	#	1 to 30
Bar-to-Bar Spacing <sup>3</sup>	mm	approx. 1.9
Spectral Width (FWHM)	nm	<5
Slope Efficiency per Bar	W/A	>1.15
Fast-Axis Divergence (90%) <sup>5</sup>	degrees	<60
Slow-Axis Divergence (90%) <sup>6</sup>	degrees	8
Wavelength Temp. Coefficient	nm/°C	~0.30
Beam Geometry after FAC Lens (n=number of bars)		10mm x 0.8mm

Electrical Parameters <sup>1</sup>		
Power Conversion Efficiency	%	>60
Threshold Current ( $I_{TH}$ )	A	<16
Operating Current ( $I_{OP}$ )	A	<80
Operating Voltage ( $V_{OP}$ )	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 water temperature, unless otherwise stated.

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

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

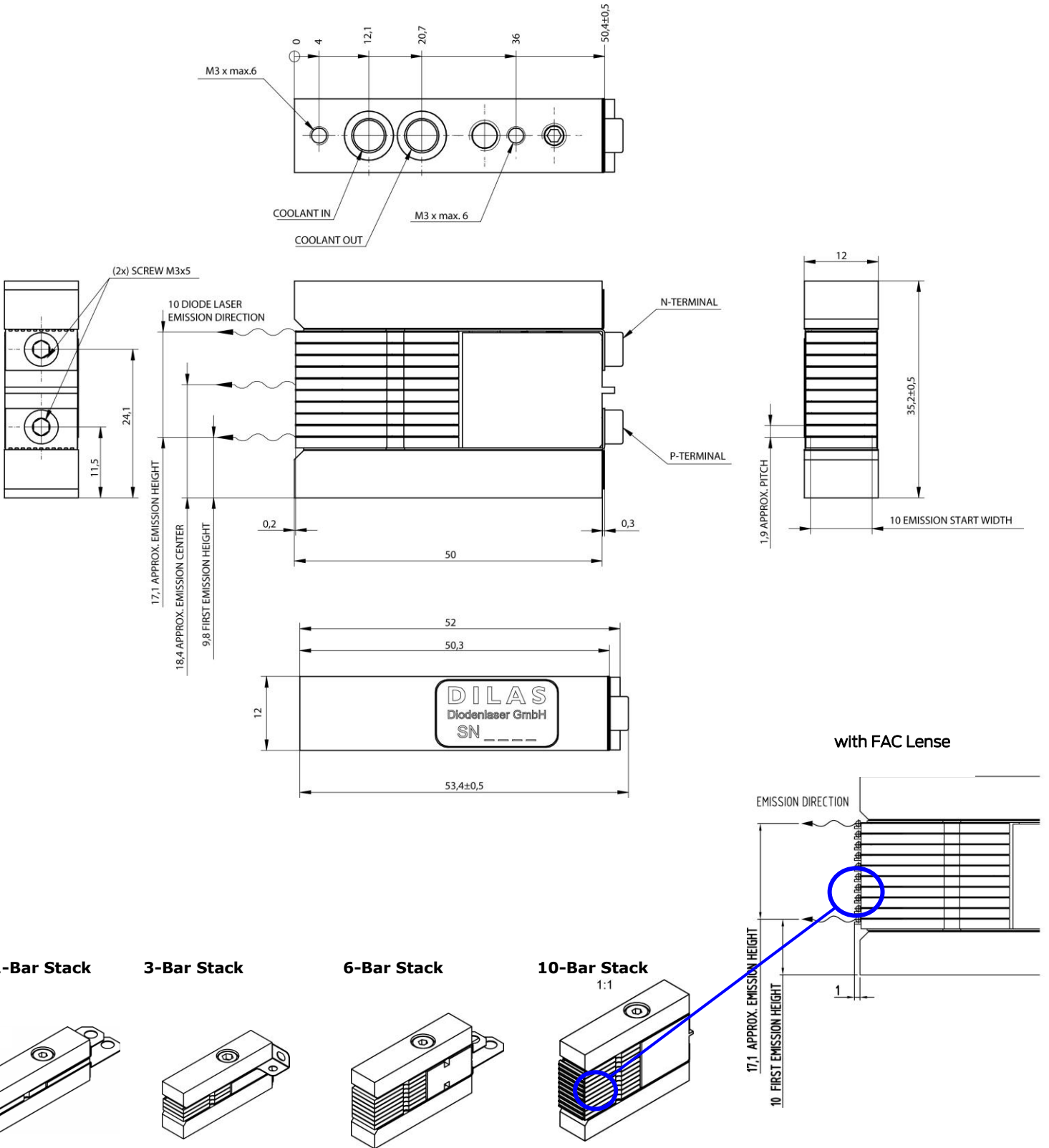
<sup>4</sup>QCW, <2% Duty Cycle, <500µsec.

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

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

# 88nm, Water-Cooled, Frameless Vertical Stacks

## Package Dimension

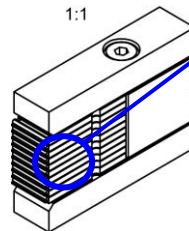
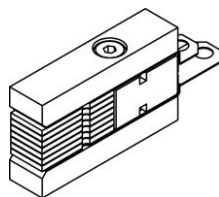
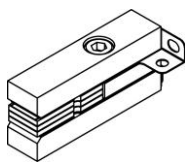
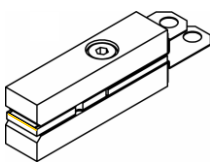


**1-Bar Stack**

**3-Bar Stack**

**6-Bar Stack**

**10-Bar Stack**



©2013 DILAS. All rights reserved. DILAS reserves the right to change product specifications without notice. For handling precautions, please reference the general handling instruction manual.

For complete details, please contact your local DILAS sales representative or visit our website at [www.DILAS.com](http://www.DILAS.com).

**Europe**  
**DILAS Diodenlaser GmbH**  
Galileo-Galilei-Straße 10  
55129 Mainz  
Germany  
Phone: +49 (0)6131 9226 0  
Fax: +49 (0)6131 9226 257  
Email: [sales@DILAS.de](mailto:sales@DILAS.de)

**North America**  
**DILAS Diode Laser, Inc.**  
9070 South Rita Road  
Suite 1500  
Tucson, AZ 85747  
Phone: +1 (520) 232-3480  
Fax: +1 (520) 232-3499  
Email: [sales@DILAS-INC.com](mailto:sales@DILAS-INC.com)

**China & Taiwan**  
**DILAS Diodenlaser GmbH**  
China Sales Office  
Room 206, Sunplus Technology, Bldg. 2  
No. 1077 Zu Chongzhi Road  
Hi-Tech Park, Shanghai 201203,  
P.R. China  
Phone: +86 (0) 21-6855-2216  
Fax: +86 (0) 21-5027-3793  
Email: [sales@dilas-china.com.cn](mailto:sales@dilas-china.com.cn)