

## 3λ, Conduction-Cooled, Fiber-Coupled, Multi-Bar Module

### Features

- Conduction cooled diode laser bars
- Multiple wavelengths
- High coupling efficiency

### Optional Accessories

- Power meter
- NTC temperature sensor
- Pilot beam



### Device Specification

Optical Parameters <sup>1</sup>	Units	Bar 1	Bar 2	Bar 3	Combined
Center Wavelength Range <sup>3</sup>	nm	1470	1520	1550	Multiple
Center Wavelength Tolerance	nm	±20	±20	±20	-
Output Power <sup>2</sup>	W	12	12	12	36
Spectral Width (FWHM)	nm	<12	<12	<12	-
Slope Efficiency	W/A	>0.3	>0.3	>0.3	>0.9
Wavelength Temp. Coefficient	nm/°C	~0.6	~0.6	~0.6	-

Fiber Parameters	Units	
Numerical Aperture	NA	0.22
Fiber Core	µm	400
Fiber Connector		HP-SMA 905 with Free Standing Fiber Tips

Electrical Parameters <sup>1</sup>					
Power Conversion Efficiency	%	>20	>20	>20	>20
Threshold Current ( $I_{TH}$ )	A	<11	<11	<11	<11
Operating Current ( $I_{OP}$ )	A	<70	<65	<65	<70
Operating Voltage ( $V_{OP}$ )	V	<1.4	<1.4	<1.4	<5

Thermal Parameters					
Operating Temperature <sup>2, 3, 4</sup> (Cooling Plate)	°C			+20 to +25	
Operating Temperature <sup>2, 3, 4</sup> (Diode Laser Module)	°C			+30 to +35	
Storage Temperature <sup>3, 4</sup>	°C			0 to +55	
Coolant Flow Rate	L/h			200 to 300	
Maximum Particle Size	µm			<10	
Operating Water Temperature	°C			+20 to +25	
Recommended Cooling Capacity	W	>90	>90	>90	>270

<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>A non-condensing environment is required for storage and operation below the ambient dew point.

