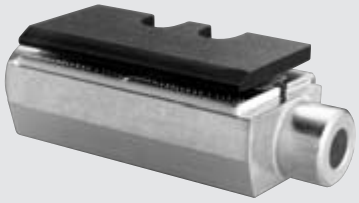
COHERENT®

PulseLife CW Horizontal Array

Water-Cooled Horizontal Linear Array

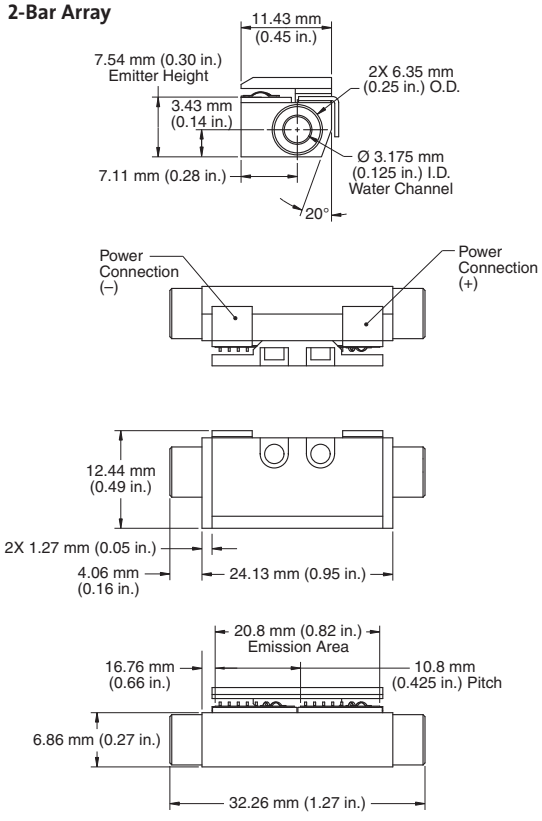


Features

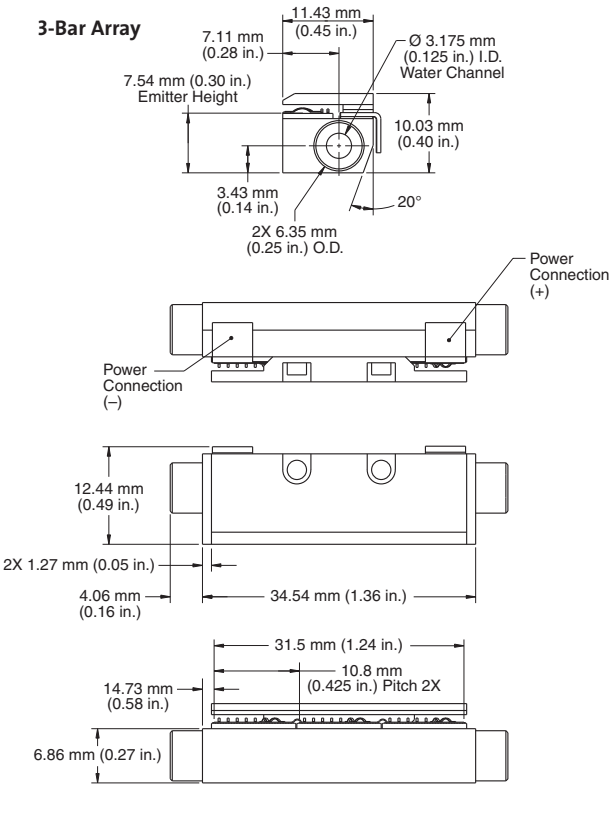
- **Hard-solder indium-free die attach**
- **Simple, reliable (not micro-channeled) water cooling**
- **Patented industry-leading AAA™ (Aluminum-free Active Area) epi**
- **>20,000 hours MTTF**

Mechanical Specifications

2-Bar Array



3-Bar Array



Superior Reliability & Performance

PulseLife™ CW Horizontal Array

Water-Cooled Horizontal Linear Array

Device Specifications

	2-Bar Arrays		3-Bar Arrays	
CW Output Power, Total (W)	80	100	120	150
CW Output Power per Bar (W)	40	50	40	50
Center Wavelength[1] (nm)	808 ±3	808 ±3	808 ±3	808 ±3
Wavelength Temperature Coefficient (nm/C)	0.28	0.28	0.28	0.28
Spectral Width[2] (FWHM)	<3	<3	<3	<3
Fast Axis Divergence (FWHM)	<35	<35	<35	<35
Slow Axis Divergence (FWHM)	<10	<10	<10	<10
Operating Current (A)	<50 (45 typ.)	<60 (55 typ.)	<50 (45 typ.)	<60 (55 typ.)
Operating Voltage (V)	<4.5 (4 typ.)	<4.5 (4 typ.)	<7 (6 typ.)	<7 (6 typ.)
Recommended Operating Temp.[3] (°C)	25	25	25	25
Recommended Operating Temp. Range[4] (°C)	15 to 35	15 to 35	15 to 35	15 to 35
Storage Temperature Range[4]	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Water Flow Rate[5] (l/min.)	>1.5	>1.5	>1.5	>1.5
Water Pressure Drop[6] (psi)	<40	<40	<40	<40
Water Filter Size (µm)	≤100	≤100	≤100	≤100
Water Quality	Distilled or clean tap water	Distilled or clean tap water	Distilled or clean tap water	Distilled or clean tap water
Intended Operation Mode	CW or QCW	CW or QCW	CW or QCW	CW or QCW

Absolute Maximum Ratings

Forward Current (A)	55	65	55	65
Reverse Current (µA)	25	25	25	25
Reverse Voltage (V)	2	2	2	2
Internal Water Pressure (psi)	100	100	100	100

[1] At rated power and operating temperature, with water flow 1.5 lpm per array.
[2] At rated power and operating temperature.
[3] Water inlet temperature.
[4] In clean dry air; non-condensing environment.
[5] Water flow rate should be maintained at 1.5 lpm or above.
[6] No more than 40 psi is required to maintain water flow rate of 1.5 lpm.

Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all PulseLife arrays. For full details of this warranty coverage, please refer to the Service section at www.Coherent.com or contact your local Sales or Service Representative.

COHERENT®

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