

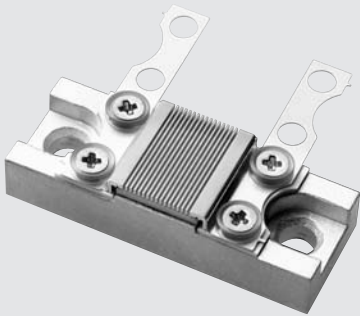


# PulseLife G-stack

2 to 16 Bar Semiconductor Laser Stacks for Quasi-CW Operation

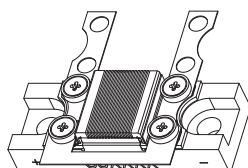
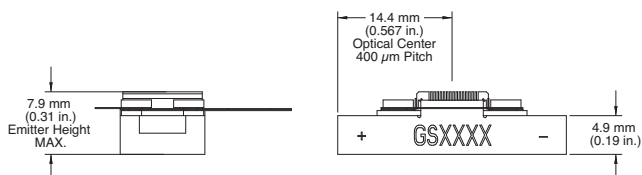
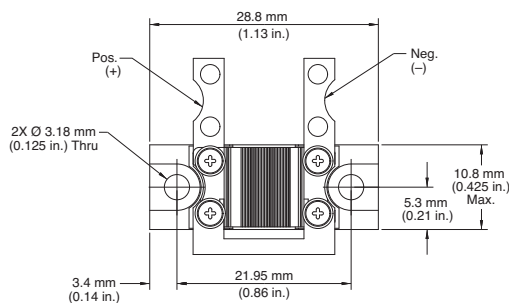
## Features

- Conduction-cooled 2-bar through 16-bar vertical stacks with up to 3200W QCW output power
- Unique AAA™ design for highest reliability and lifetime
- PulseLife™ hard-solder technology
- Custom power, wavelength, temperature and form factor options available

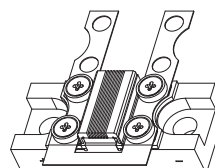
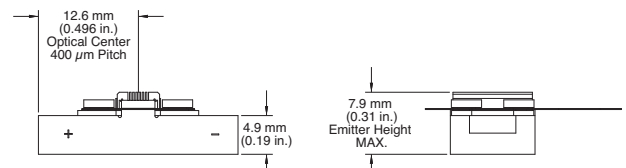
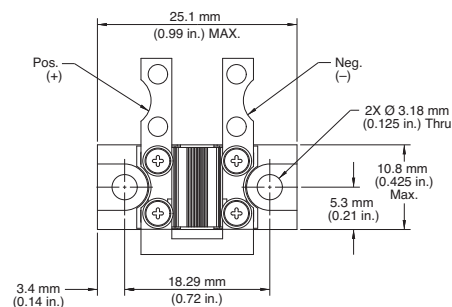


## Mechanical Specifications

GH8-16



GH2-7



Superior Reliability & Performance

# PulseLife™ G-stack

## 2 to 16 Bar Semiconductor Laser Stacks for Quasi-CW Operation

### Device Specifications

	200W/bar G-stack
Form Factors	
GH2-7	2 to 7 bar stack
GH8-16	8 to 16 bar stack
QCW Output Power, Total (W)	Up to 3200
QCW Output Power per Bar (W)	200
Pulse width (usec)	<500
Duty Cycle (%)	≤4
Bar-to-bar spacing (um)	400
Center Wavelength <sup>1</sup> (nm)	808 ±3
Wavelength Temperature Coefficient (nm/C)	0.28
Spectral Width <sup>2</sup> (FWHM)	<3
Fast Axis Divergence (FWHM)	<35
Slow Axis Divergence (FWHM)	<12
Polarization	TM
Threshold Current (A)	30
Operating Current (A)	<220
Operating Voltage <sup>3</sup> (V)	<2 per bar
Recommended Operating Temperature (°C)	25
Recommended Operating Temperature Range <sup>4</sup> (°C)	15 to 35
Storage Temperature Range <sup>5</sup>	-40 to +60
Intended Operation Mode	QCW only

### Absolute Maximum Ratings

Forward Current (A)	240
Reverse Current (μA)	25
Reverse Voltage (V)	2

<sup>1</sup> At rated power and operating temperature.

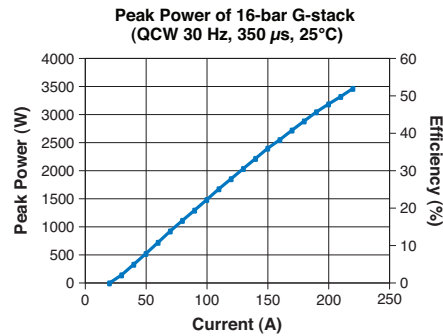
<sup>2</sup> At rated power and operating temperature.

<sup>3</sup> Total operating voltage varies with bar count.

<sup>4</sup> Contact Coherent for extended operating temperature range requirements (e.g.: 50°C or 80°C operation).

<sup>5</sup> In clean dry air; non-condensing environment.

### Electrical Characteristics



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 G-stacks. For full details of this warranty coverage, please refer to the Service section at [www.Coherent.com](http://www.Coherent.com) or contact your local Sales or Service Representative.



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