



MORE LIGHT

JOLD-120-QPXF-2P W

## Fiber-coupled diode lasers: qcw, passively cooled with tap water

Design 215531124

### Features

- High optical output power of 120 W qcw
- Wavelengths: 808 and 938 nm
- Fiber core diameter: 600  $\mu\text{m}$  (NA 0.22)
- Integrated pilot laser and power monitor
- Long lifetime > 1GShot, high reliability

### Applications

- Pumping of solid-state lasers and fiber lasers
- Material processing
- Medical applications

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### Specifications (start of life)

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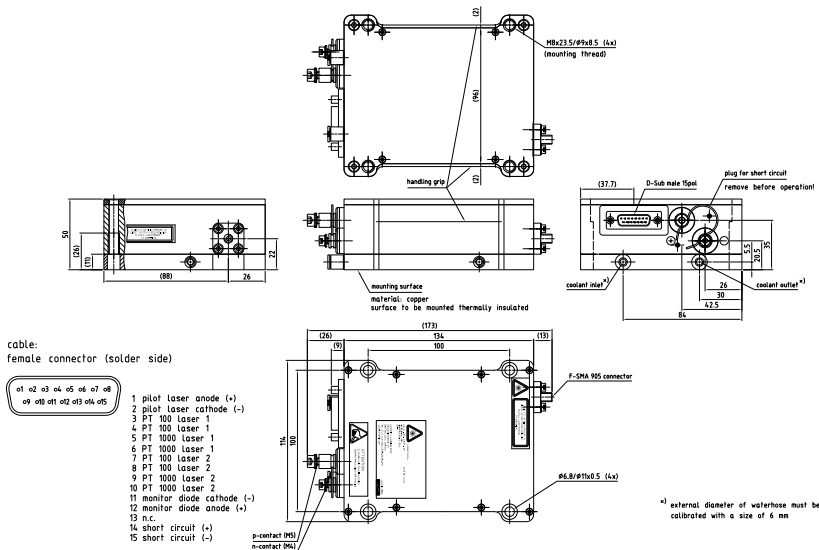
Operation Mode	qcw maximum current		
Maximum Pulse Length/Duty Cycle	≤ 0.3 ms/≤ 20 %		
Maximum Optical Output Power	120	120	W
Center Wavelength at 25 °C	808	938	nm
Center Wavelength Variation at 25 °C	5	5	nm
Typical Spectral Bandwidth (FWHM)	5	5	nm
Maximum Spectral Bandwidth (FWHM)	6	6	nm
Typical Operation Current	105	120	A
Maximum Operation Current	120	130	A
Typical Threshold Current	18	20	A
Maximum Threshold Current	20	25	A
Typical Slope	1.4	1.2	W/A
Minimum Slope	1.2	1.0	W/A
Maximum Operating Voltage	5.5	5.5	V
Fiber Core Diameter, Numerical Aperture	600 μm, NA 0.22		
Fiber Connector	F-SMA 905, potential free		
Power Monitor	Infineon, SFH 229		
Pilot Laser	0.5 ... 3 mW, 650 nm ± 15 nm, 3 ... 5 V, 40 ± 15 mA, power not adjustable (only for teaching and targeting purposes before laser operation)		
Anode, Cathode Connectors	M5, M4 (e.g. socket cap screws ISO 4762)		
Signal Connector	D-Sub, male, 15 pin		
Operation Conditions	Non-condensing atmosphere		
Expected Lifetime	> 1 GShot		

### Cooling

Flow Rate	> 3 l/min		
Water Temperature	8 ... 23 °C		
Water Pressure	400 kPa maximum inlet and outlet pressure, < 80 kPa pressure drop		
Water Connectors	Ø 6 mm (OD) push-in fittings		
Water Quality	Industrial water, unfiltered up to a particle size of 0.5 mm		
Diode Laser Operating Temperature	15 ... 30 °C, measured with internal temperature sensor		
Integrated Temperature Sensor	PT 100 and PT 1000, separately for each diode laser		
Note	Specify exact wavelength needed with your order		

### See general user information!

Options on request: For additional designs or specifications please visit our website: [www.jenoptik.com](http://www.jenoptik.com)



JENOPTIK Optical Systems GmbH  
 Goeschwitzer Strasse 25 | 07745 Jena | Germany  
 Phone +49 3641 65-3053 | Fax +49 3641 65-4011  
[laser.sales@jenoptik.com](mailto:laser.sales@jenoptik.com) | [www.jenoptik.com](http://www.jenoptik.com)

