



New: Fiber-Coupled Diode Lasers

cw, passively cooled with air or tap water, new: 880 nm



JOLD-100-CPXF-2P A
JOLD-x-CPXF-2P W

Design 215533224
Design 215533124 | 215533224

Features:

- High optical output power up to 140 W cw
- Fiber core diameter: 400 μm | 600 μm (NA 0.22)
- Long lifetime > 20,000 h, high reliability
- Air cooling possible

Applications:

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

New: Fiber-Coupled Diode Lasers

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Preliminary Specifications (Start of Life)

Product

JOLD-100-CPXF-2P A,
Design 215533224

JOLD-100-CPXF-2P W / JOLD-140-CPXF-2P W
Design 215533124 (600 μm) / 215533224 (400 μm)

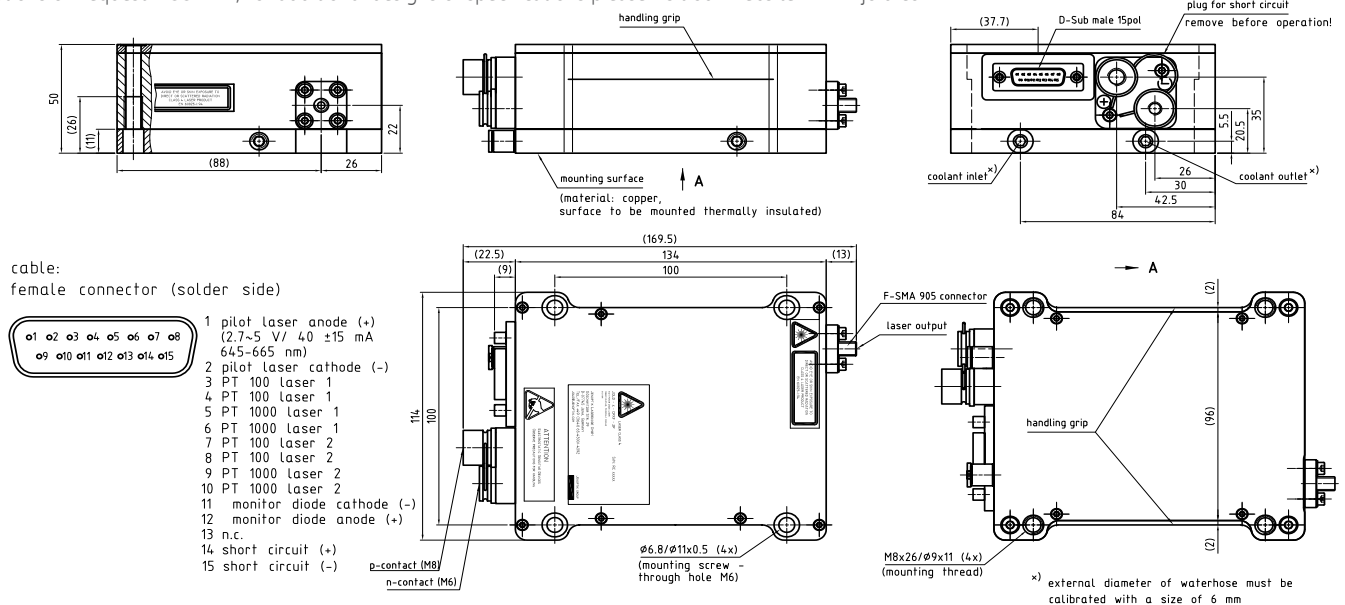
Operation Mode	cw, power modulation only between threshold and maximum current									
Maximum Optical Output Power	100	100	100	100	100	140	140	140	140	W
Center Wavelength at 25 °C	880 *	915 *	938 *	976 *	808	880	915	938	976	nm
Center Wavelength Variation at 25 °C	5 *	5 *	5 *	5 *	3	3	5	5	3	nm
Typical Spectral Bandwidth (FWHM)	5	5	5	5	5	5	5	5	5	nm
Maximum Spectral Bandwidth (FWHM)	6	6	6	6	6	6	6	6	6	nm
Typical Operation Current	90	85	85	85	85	105	100	100	100	A
Maximum Operation Current	105	100	100	100	95	120	115	115	115	A
Typical Threshold Current	9	6	6	6	19	9	6	6	6	A
Maximum Threshold Current	12	9	9	9	22	12	9	9	9	A
Typical Slope	1.3	1.3	1.3	1.3	1.6	1.5	1.5	1.5	1.5	W/A
Minimum Slope	1.0	1.0	1.0	1.0	1.3	1.2	1.2	1.2	1.2	W/A
Maximum Operating Voltage	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	V
Fiber Core Diameter	400 µm **				600 µm	400 µm **				
Numerical Aperture	NA 0.22				NA 0.22		NA 0.22			
Fiber Connector	F-SMA 905, potential free; metal armored patchcord only! ; ** free standing fiber towards the module									
Power Monitor	Infineon, SFH 229									
Pilot Laser	1 ... 3 mW, 650 nm ± 10 nm, 3 ... 5 V, 85 ... 115 mA, power not adjustable (only for teaching and targeting purposes before laser operation)									
Anode, Cathode Connectors	M8, M6 (e.g. socket cap screws ISO 4762)									
Signal Connector	D-Sub, male, 15 pin									
Operation Conditions	Non-condensing atmosphere									
Expected Lifetime	> 20,000 h (constant current), partly under qualification									

Cooling:

Flow Rate	> 3 l/min	
Water Temperature	No water or TEC needed,	8 ... 20 °C
Pressure Drop	air cooling possible	< 80 kPa
Water Connectors		$\varnothing$ 6 mm push-in fittings
Water Quality		Industrial water, unfiltered up to a particle size of 0.5 mm
Diode Laser Operating Temperature	15 ... 55 °C, measured with internal sensor	15 ... 35 °C, measured with internal 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: 88x nm; for additional designs or specifications please visit our website: www.jold.com



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