



JENOPTIK

## Diode laser stack in housing: qcw, tap water cooled | with collimation JOLD-x-QAF-2x8A

Design 04022108124

### Features

- High optical output power up to 1.5 kW
- Wavelength: 808 nm
- Small and robust design, light weight
- Sealed housing
- Cooling with tap water

### Applications

- Pumping of solid-state lasers
- Medical applications

# Diode laser stack in housing | qcw, tap water cooled | with collimation

## JOLD-x-QAF-2x8A

Specifications (start of life)	JOLD-x-QAF-2x8A Design 04022108124				
Operation Mode	qcw				
Maximum Pulse Length/Duty Cycle	50 ms/15 %	100 ms/20 %	200 ms/33 %	400 ms/55 %	
Maximum Pulse Power	1560	1100	560	300	W
Maximum Mean Power	234	220	184	165	W
Maximum Pulse Energy	78	110	112	120	J
Center Wavelength at 25 °C	808	808	808	808	nm
Center Wavelength Variation at 25 °C	10	10	10	10	nm
Typical Operation Current	110	85	55	42	A
Maximum Operation Current	120	90	60	45	A
Typical Threshold Current	15	15	15	15	A
Maximum Threshold Current	20	20	20	20	A
Typical Slope	16.6	15.8	14.0	11.2	W/A
Minimum Slope	14.8	14.6	12.4	10.0	W/A
Maximum Operating Voltage	30	30	30	30	V
Typical Fast Axis Divergence 95 % after Collimation	1	1	1	1	°
Typical Slow Axis Divergence 95 %	10	10	10	10	°
Spot Size (at exit window)	15 mm x 26 mm				
Anode, Cathode Connectors	Via two M3 x 8 screws (ISO 4762)				
Weight	99				g
Operation Conditions	Non-condensing atmosphere; no cleanroom needed				
Expected Lifetime	15	15	7	4	Mshots
<b>Cooling</b>					
Flow Rate	1.6 l/min ± 10 %				
Water Temperature	15 ... 25 °C				
Maximum Inlet Pressure	400 kPa				
Maximum Pressure Drop	100 kPa				
Water Connection	Via o-ring gaskets 6 mm x 1 mm, EPDM, 70 shore				
Water Quality	Industrial grade, anti-freeze possible, particle filter < 100 µm (not included)				
Cooling System	Do not use any material that in combination with copper would form galvanic elements (e.g. aluminum, zinc, brass)				

### See general user information!

Options on request: variation number of bars

