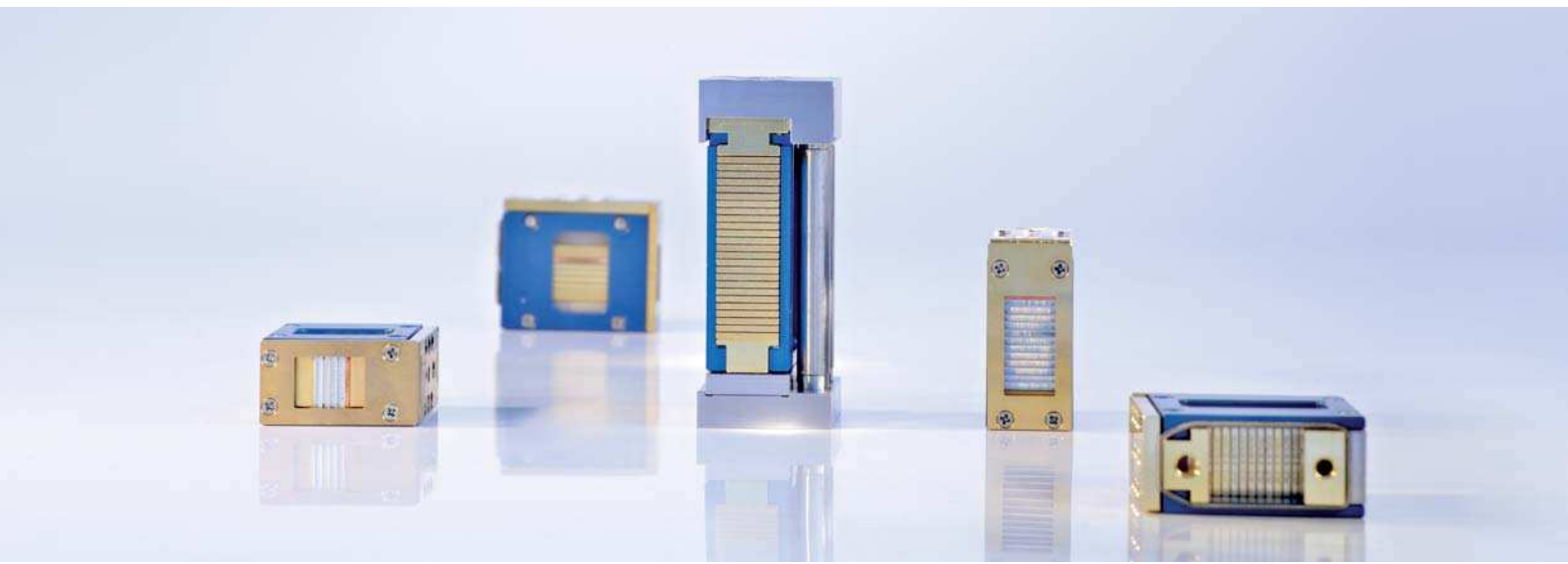




Vertical Diode Laser Stacks

cw, actively cooled, high power



JOLD-x-CANN-xA

- Features:**
- Very high optical output power of 120 W cw per bar
 - High efficiency, low divergences
 - Lifetime > 10,000 h, high reliability

Design 2104xxx24

- | | |
|-------------------------|--------------------------|
| 210480324 (3 submounts) | 210480824 (8 submounts) |
| 210480424 (4 submounts) | 210481024 (10 submounts) |
| 210480524 (5 submounts) | 210481224 (12 submounts) |
| 210480624 (6 submounts) | 210430624 (25 submounts) |

Applications:

- Pumping of solid-state lasers and fiber lasers
- Material processing
- Medical applications (e.g. hair removal)

Vertical Diode Laser Stacks

cw, actively cooled, high power

Specifications (Start of Life)

Product

JOLD-x-CANN-xA, Designs 210480324 (3 submounts), 210480424 (4 submounts), 210480524 (5 submounts), 210480624 (6 submounts), 210480824 (8 submounts), 210481024 (10 submounts), 210481224 (12 Submounts), 210430624 (25 submounts)

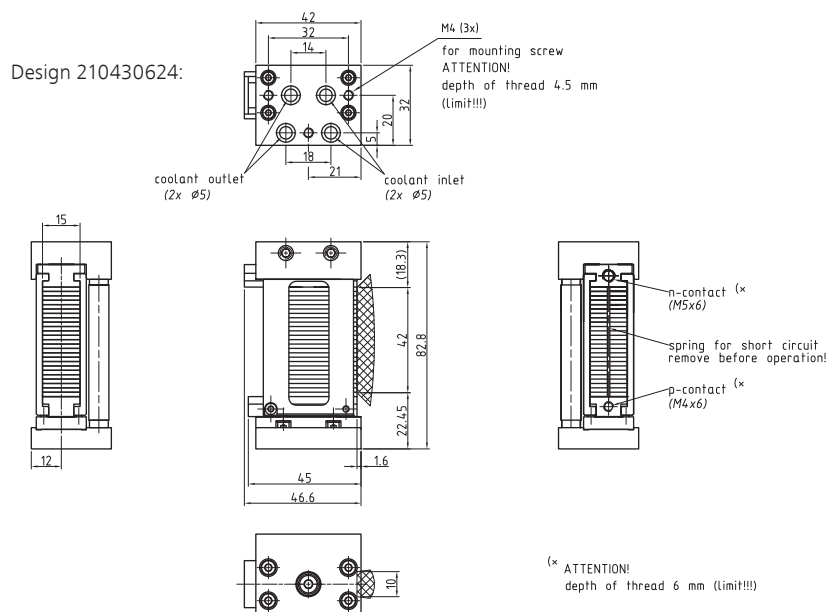
Operation Mode	cw only								
Maximum Optical Output Power	360	480	600	720	960	1200	1440	3000	W
Number of Submounts	3	4	5	6	8	10	12	25	
Power per Submount	120	120	120	120	120	120	120	120	W
Center Wavelength at 25 °C	938 or 976								
Center Wavelength Variation at 25 °C	5	5	5	5	5	5	5	5	nm
Typical Spectral Bandwidth (FWHM)	3	3	3	3	3	3	3	3	nm
Maximum Spectral Bandwidth (FWHM)	6	6	6	6	6	6	6	6	nm
Typical Operation Current	125	125	125	125	125	125	125	125	A
Maximum Operation Current	135	135	135	135	135	135	135	135	A
Typical Threshold Current	15	15	15	15	15	15	15	15	A
Maximum Threshold Current	18	18	18	18	18	18	18	18	A
Typical Slope	3.3	4.4	5.5	6.6	8.8	11.0	13.1	27.3	W/A
Minimum Slope	3.0	4.0	5.0	6.0	8.0	10.0	12.0	25.0	W/A
Maximum Operating Voltage	6	8	10	12	16	20	24	49	V
Typical Fast Axis Divergence FWHM	27	27	27	27	27	27	27	27	°
Typical Fast Axis Divergence 86 %	34	34	34	34	34	34	34	34	°
Typical Fast Axis Divergence 95 %	46	46	46	46	46	46	46	46	°
Typical Slow Axis Divergence FWHM	7	7	7	7	7	7	7	7	°
Typical Slow Axis Divergence 86 %	8	8	8	8	8	8	8	8	°
Typical Slow Axis Divergence 95 %	9	9	9	9	9	9	9	9	°
Operation Conditions	Cleanroom class 100, non-condensing atmosphere								
Expected Lifetime	> 10,000 h (constant current)								

Cooling:

Number of Submounts	3	4	5	6	8	10	12	25	
Flow Rate	1.3	1.7	2.0	2.3	3.0	3.6	4.3	8.3	l/min
Flow Rate Tolerance	± 10 %								
Water Temperature	15 ... 35 °C								
Maximum Inlet Pressure	400 kPa								
Pressure Drop	< 200 kPa								
Water Quality	Deionized 2 ... 6 µS/cm, mixed bed ion exchanger, particle filter < 25 µm (not included)								

See Safety and General User Information!

Options on request: 915 nm; for additional designs or specifications please visit our website: www.jenoptik.com



JENOPTIK | Lasers & Material Processing

JENOPTIK Laser GmbH

Goeschwitzer Strasse 29 | 07745 Jena | Germany

Phone: +49 3641 65-3053 | Fax: +49 3641 65-4011

E-mail: sales-laser.lm@jenoptik.com | www.jenoptik.com/diodelasers