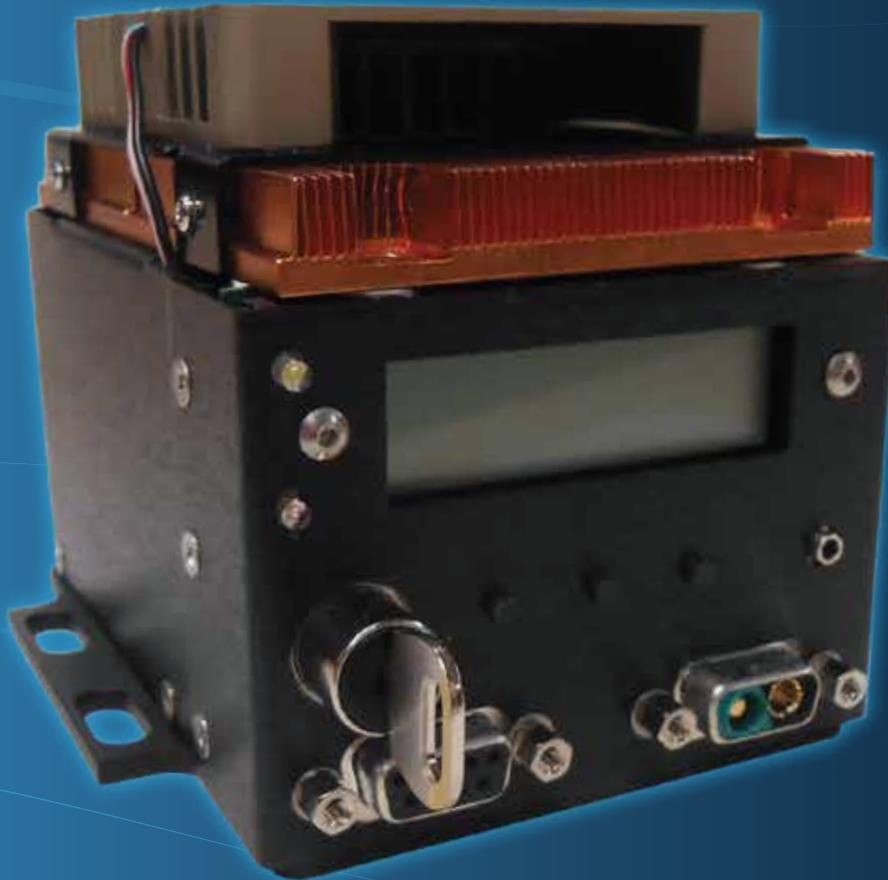


GRANDE

High Power Laser Diode



The Grande laser provides up to 20 Watts of optical power for demanding applications that require high output powers. Controlled by an internal micro-processor, the design features an LCD display, which provides users safety status as well as real time information on power current settings and internal temperature. Drive current and bias settings are user controllable with 12 bits of resolution (4096 steps). The Grande features passive cooling for the circuitry and laser. Input to the module is typically 5 VDC, while blue and green lasers require 8VDC.

Visible Specifications

	Grande3 (LD2072)	Grande0.9 (LD2071)	Grande0.7 (LD2068)
Wavelength (nm)	450	515	635
Power (W)	3.0	0.9	0.65
Beam Size	0.97 x 3.13	0.78 x 3.23	1.20 x 4.64
Divergence	7.8 x 2.5	8.0 x 1.9	7.1 x 2.3
Lens	G35	G35	G36B
Modulation Option	Available	Available	Available
Modulation Option Bandwidth	TBD*	TBD*	TBD*
Modulation Option Rise Time	TBD*	TBD*	TBD*
Supply Voltage (VDC)	8-12	8-12	5
Maximum Supply Current (Amps)	10	10	5
Operating Temp (°C)	15-30	15-30	15-30
Storage Temp (°C)	0-55	0-55	0-55
Size L x W x H (in.)	4.6 x 4.0 x 3.5	4.6 x 4.0 x 3.5	4.6 x 4.0 x 3.5
Weight (lbs.)	2	2	2
CDRH Classification	4	4	4
Warranty	1 Year	1 Year	1 Year

* Modulated units available Q1 2015

Standard Features

- High pointing stability
- Wide range of powers and fan angles
- High intensity
- Adjustable focus
- Rugged, industrial-grade design

Applications

- Light-duty material processing
- Localized heating
- Display
- Machine vision

Options†

- Circularized beam
- Fiber coupled output

Infrared Specifications

	GRANDE5 (LD2088)	GRANDE10 (LD2077)	GRANDE5 (LD2087)	GRANDE10 (LD2086)	GRANDE5 (LD2084)	GRANDE10 (LD2085)
Wavelength (nm)	808	808	915	915	980	980
Power (W)	5	10	5	10	5	10
Beam Size	0.66 x 2.86	0.66 x 2.87	0.66 x 2.87	0.66 x 2.87	0.66 x 2.87	0.66 x 2.87
Divergence	58.4 x 13.9	61.6 x 8.8	58.4 x 13.9	58.4 x 13.9	58.1 x 13.7	58.1 x 13.7
Lens	G41B	G41B	G41B	G41B	G41B	G41B
Modulation Option	Available	Available	Available	Available	Available	Available
Modulation Option Bandwidth	TBD*	TBD*	TBD*	TBD*	TBD*	TBD*
Modulation Option Rise Time	TBD*	TBD*	TBD*	TBD*	TBD*	TBD*
Supply Voltage (VDC)	5	5	5	5	5	5
Maximum Supply Current (Amps)	10	20	10	20	10	20
Operating Temp (°C)	15-30	15-30	15-30	15-30	15-30	15-30
Storage Temp (°C)	0-55	0-55	0-55	0-55	0-55	0-55
Size L x W x H (in.)	4.6 x 4.0 x 3.5	4.6 x 4.0 x 3.5	4.6 x 4.0 x 3.5	4.6 x 4.0 x 3.5	4.6 x 4.0 x 3.5	4.6 x 4.0 x 3.5
Weight (lbs.)	2	2	2	2	2	2
CDRH Classification	4	4	4	4	4	4
Warranty	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year

* Modulated units available Q1 2015

† Additional data sheets available for circularized beam and fiber coupled output options