Laser Module - RD series

130-250W CW Module

The RD Series Laser Module delivers the reliability and performance of diode pumping to high power industrial and scientific laser systems, virtually eliminating the downtime experienced by older lamp-based laser technologies. Drive your laser system to greater than 250 watts of CW power.

You can use this reliable and efficient pump cavity to serve as the "engine" in new laser system development and production, or to convert your existing lamp-based designs to state-of-the-art diode pumping. The module efficiently pumps a Nd:YAG laser rod by radial arrays of efficiently coupled long lifetime laser diode bars, and delivers good pump uniformity and stable lensing performance. The laser module is powered with low voltage from a reliable solid-state driver, and cooled by re-circulating filtered water from a simple chiller system. Installations need only single phase input power, and central cooling water is not required.

The pump head is excellently suited for high power multi-mode laser installations, such as deep engraving, drilling and micro welding, and can also provide the high stability and beam quality required for higher power TEMoo installations.

Model	Rod Diameter[1]	Output Power[2]	Diode Bias Voltage[3]	Drive Current[2]
RD40-1C2	4 mm	> 130 W	60 VDC	0-38A (25A nominal)
RD50-1C2	5 mm	> 140 W	60 VDC	0-38A (25A nominal)
RD50-2C2	5 mm	> 250 W	120 VDC	0-38A (25A nominal)
RD63-1C2	6 mm	> 150 W	60 VDC	0-38A (25A nominal)
RD63-2C2	6 mm	> 250 W	120 VDC	0-38A (25A nominal)

1. Rod length is 116 mm with flat/flat faces and 0.6% Nd doping
2. Minimum 1064 nm multi-mode output in a short cavity (280 ± 5 mm flat HR/flat 90%R OC) CW oscillator arrangement at delivery.
3. Max current is 38A. Required voltage at the pump head stated w/o consideration for inefficiencies in the electrical system.

** Pulsed versions available.

Green Laser Module

GLMS-01,05,10

Based on our years experiences of laser crystal, we developed the GLMS series of green laser products. We control the quality and cost better by using our own green laser micro-chip crystal and optics.

Product Features:

Compact, reliable and sturdy
APC circuit inside
High power stability
Wide operation temperature window
Low cost

Applications:

Green Laser pointer
Alignment
Survey
Test & Measurement

Specifications:	
Wavelength	532nm
GLMS-01 output power	1mW
GLMS-05 output power	5mW
GLMS-10 output power	10mW
Beam Mode	TEM00
Beam Diameter	<1.5mm
Beam Divergence	<1mrad
Power Time Stability	<3% over 2 hrs
GLMS-01 Power Temperature Stability	<20%
GLMS-05 Power Temperature Stability	<20%
GLMS-10 Power Temperature Stability	<20%
Residual IR	><0.2%
Warm-up Time	><5min
Operating Current	<300mA
Power Supply	DC2.5-3.2V
Control Circuit	>Auto Power Control
Eletrical Connection	+Red, -Black
Storage Temperature	-40 ~80
Life Time	>>3000hrs