RUGGEDIZED Industrial Laser Diode Modules





NEED A TOUGHER LASER?

BEA Lasers' Ruggedized Industrial Laser Diode Modules stand up to the most demanding conditions.

Ready for virtually unlimited heavy-duty applications, this unit is built to take extreme abuse in the toughest jobs.



Applications:

Metal-forming Drilling Punch Presses Heavy Duty Saws Welding Alignment Targeting Positioning Riveting

With a stainless steel, black zinc-plated case and a steel mounting lock-nut, the unit may be panel- or bracket-mounted and used in the heaviest equipment applications. The ruggedized Industrial Laser Diode Module is built to withstand liquids (water resistant), vibration, chemicals, impact and dust.

The complete package includes the ruggedized laser module, a connector cable assembly and a DIN railmounted power supply. Mounting brackets and other styles of cables are available, including straight, right-



angle (shown at left) and right-angle cable with LED "Power On" Indicator. Our modules are also available with industry-standard, fully threaded, stainless steel sensor body.

Ruggedized Industrial Laser Diode Modules are available in Green (532nm) or Red (650nm) colors.

Green: MIL301GHD | Red: MIL301RHD

BEA's Laser Diode Modules are factory-set to FDA-Approved Power Levels (<5mw, class IIIa) to comply with Section 21 DFR Part 1040.10-11.



Light from green lasers is

7 times more visible to the human eye
than red laser light!

If you have high ambient light conditions, green laser diode modules are the choice for you.

When paired with BEA Lasers Diffractive Optical Elements, our Ruggedized Industrial Laser Diode Modules will aid in targeting, alignment and positioning applications.

Pattern Designs Available:

> Standard: Dot

Options: Crosshair Target Line











A Division of BEA Electro Sales

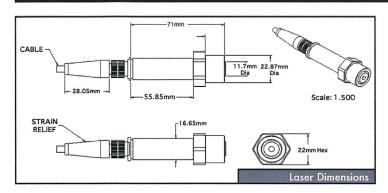
2330 Brickvale Drive Elk Grove Village, IL 60007 PHONE: (847) 238-1420 FAX: (847)-238-1423 www.beg-eo.com

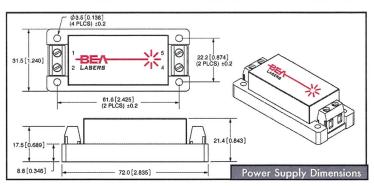


Rugged & Green Ruggedized Industrial Laser Diode Modules











Model Numbers:

Contact BEA Lasers for Full Model Number Information

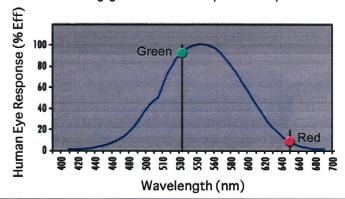
| | Optical | |
|----------------------------------|-------------------|-------------------|
| Output Power (mW) | 1,3,5 | 1,3,5 |
| Wavelength (nm) | 650 (Red Laser) | 532 (Green Laser) |
| Class | IIIa | IIIa |
| Lens | Plastic | Glass |
| Focus | Adjustable | Fixed |
| Operation Mode | Continuous Wave | Continuous Wave |
| Spectral Line width (nm) | <0.1 | <0.1 |
| Beam Diameter, 1/e² (mm) | <1 | <1.5 |
| Beam Divergence (mrad) | 0.8 | <1.4 |
| Output Power Stability for 1 hou | <±5% (typical 1%) | <±5% (typical 1%) |
| | | |

Electrical/Mechanical Operating Voltage (VDC) Operating Current (mA) <30 <300 Circuit Design Auto Power Control Auto Power Control Lead Length 6.5' / 2M Black Zinc-Coated Stainless Steel Housing Material Length (mm) 2.795 inches / 71mm Body Diameter (mm) .678 inches / 16.65mm MTTF (hrs)³ >5,000 **DIN Rail Power Supply** 100Vac ~ 240 Vac Rated Input Voltage Nominal Current 1500 mA Humidity 20%~90% RH MAX. Required Free Space 25mm on all sides UL508 Listed, UL 1310 Listed Class 2

power, UL 60950-1 Recognized

GREEN LASERS vs. RED LASERS

Green laser light is significantly brighter than red laser light. All other factors being equal, the unaided human eye will perceive green laser light as over 8 times brighter than the common red laser (at 650nm). Green lasers are being adopted as a replacement for red lasers. Along with increased visibility, many OEMs are enjoying the benefits of offering green lasers as a premium option.



WARNING: Laser Beams and Hazards

UL/cUL

Lasers produce an intense, highly directional beam of light. If directed, reflected or focused upon an object, laser light will be partially absorbed, raising the temperature of the surface and/or the interior of the object, potentially causing an alteration or deformation of the material. Lasers can also cause tissue damage. However, lower-power lasers may emit levels of laser light that are not a hazard.