



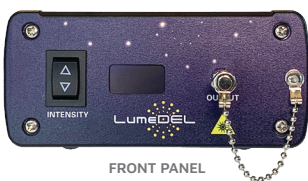
Model **N850** [Near Infrared]

NewDEL™ NIR Fiber-coupled LED

Meticulously engineered photonic tools built to advance the goals of our customers, whether they are forging new paths in scientific discovery or implementing an ongoing project.



The NewDEL™ NIR product group of fiber-coupled LEDs combines narrowband output at wavelengths targeting key NIR applications. As with other narrowband models in the NewDEL™ incorporates controller and driver circuitry and uses PWM dimming exclusively to prevent wavelength drift. Contact us if you need wavelengths not already listed on our website.



FRONT PANEL



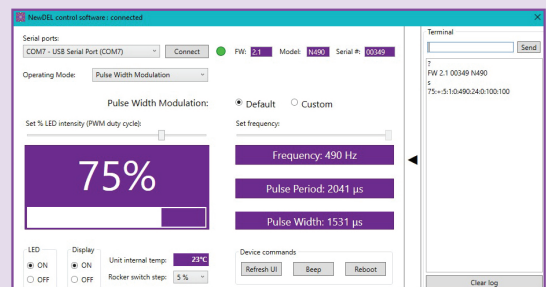
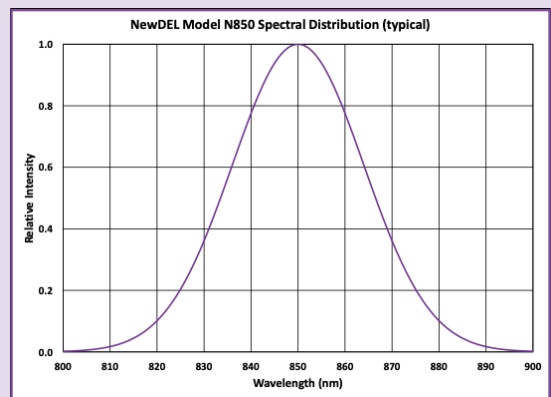
REAR PANEL

SPECIFICATIONS

- Central wavelength: **850 nm**
- FWHM: 33 nm
- Recommended fiber patch cable: Model **FP50H**, High -OH Silica Optical Fiber, NA0.50
 - Optical power emitted (typical maximum): **130 mW**
- SMA905 connector (FC option upon request)

APPLICATIONS

- Virtual reality eye tracking
- Temperature mapping in 3D printing
- Photoacoustic imaging
- IR time of flight
- CCTV illumination

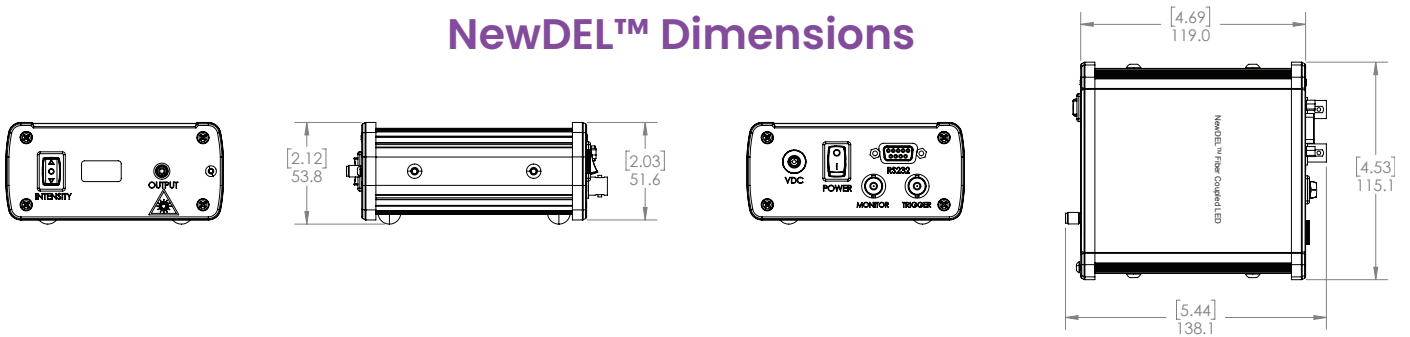


SOFTWARE INTERFACE



500 N. Commercial St.
Suite 502E
Manchester, NH 03101

NewDEL™ Dimensions



NewDEL™ Specifications

| | |
|---|--|
| Optical coupling | SMA 905 type connector for multi-mode optical fibers with core diameters up to 1000 μm (FC connector optional) |
| Optical output power (typical) | 130 mW |
| Wavelength range | 850 nm |
| Operating modes - Pulse Width Modulation | Default 490Hz Custom (user set) 1-500Hz |
| Operating modes - Internal Trigger | Set Pulse Delay 10ms – 32s Set Pulse Duration 10ms – 32s |
| Operating modes - External Trigger | LED output controlled by 0-5V TTL |
| Serial Interface | RS-232, DB-9 female Converter cable RS-232 to USB-A (FTDI) is included |
| Trigger connector | Optically isolated BNC, 50 Ohms for External Trigger mode Cable not included |
| Monitor connector | BNC, 50 Ohms for reading PWM or pulse waveform Cable not included |
| Manual operation | Front panel intensity switch for Pulse Width Modulation mode Step size set by software; 1, 2, 4, 5, or 10 percent |
| Remote Operation - Software | Windows based GUI, available by download |
| Remote Operation - Programmability | Serial commands are provided to control a unit and query its status using a terminal program or other suitable programming systems |
| Front Panel Display | Passive Matrix OLED, can be deactivated through software % PWM Intensity or trigger operating mode with frequency |
| Thermal management | Passive cooling via conduction Internal temperature sensor/monitor readable by software |
| Power supply | Universal AC/DC Wall adapter, 90 to 264VAC at 47 to 63Hz input 12V 12W output, 1.5 m cord length, DOE VI Efficiency, Class B EMI, Safety Approvals: cUL/UL, RCM, CB, CE (international socket blade options) |
| Dimensions/Weight | 4.7 x 4.5 x 2.0 in (119.1 x 115.1 x 51.6 mm) / 1.1 lbs (0.5 kg) |

Peripherals & Accessories

