



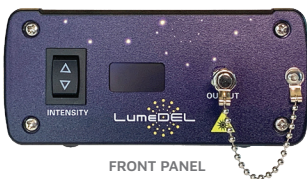
Model **N475** [Visible]

NewDEL™ VIS 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.



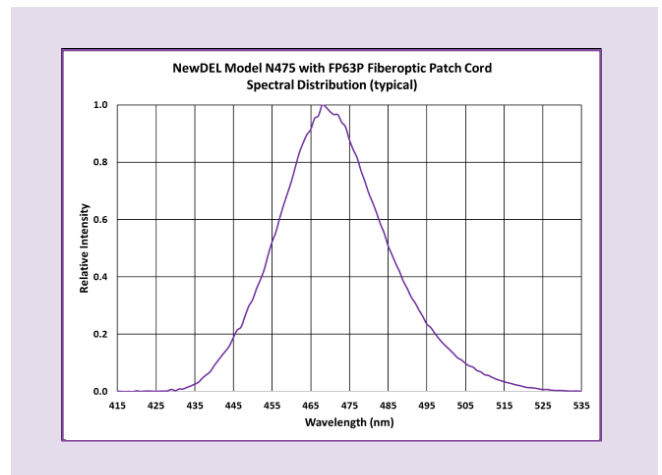
The NewDEL™ VIS fiber-coupled LED product group encompasses eight narrowband sources with center wavelengths ranging from 455 nm to 680 nm. The collection includes phosphor-coated green and amber LEDs to address the so-called green gap problem – the lack of a high efficacy semiconductor materials system for the green- yellow spectral region.



FRONT PANEL



REAR PANEL

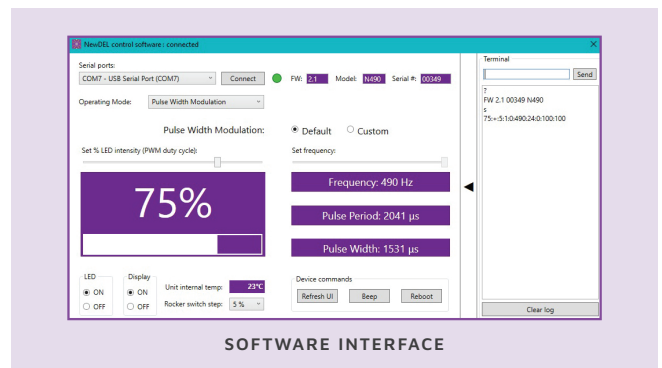


SPECIFICATIONS

- Center wavelength: **475 nm**
- FWHM: 25 nm
- Recommended fiber patch cable: **FP63P**, High-NA, Plastic Optical Fiber, NA0.63
 - Optical power emitted (typical maximum): **210 mW**
- SMA905 connector (FC option upon request)

APPLICATIONS

- Photocatalytic hydrogen production
- Photobiomodulation therapy
- Fluorescence excitation of FITC and GFP
- Antimicrobial light-based therapies
- Photocuring of camphorquinone based dental composites
- Optogenetic activation of ChR2



SOFTWARE INTERFACE



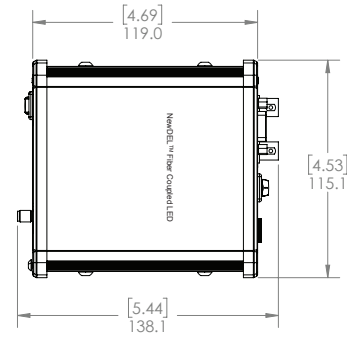
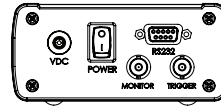
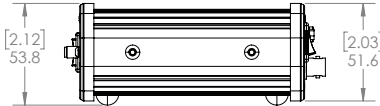
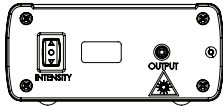
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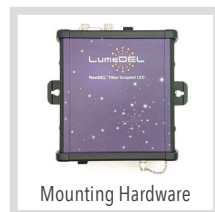
NewDEL™ Dimensions



NewDEL™ Specifications

| | | | |
|---|--|--------------|--------------|
| Optical coupling | SMA 905 type connector for multi-mode optical fibers with core diameters up to 1000 μm (FC connector optional) | 2.12 53.8 | 2.03 51.6 |
| Optical output power (typical) | 210 mW | | |
| Center Wavelength | 475 nm +/- 5 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



All specifications are subject to change without notice. | All LumeDEL™ Terms and Conditions apply see: <https://lumedel.com/terms-of-sale/>

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