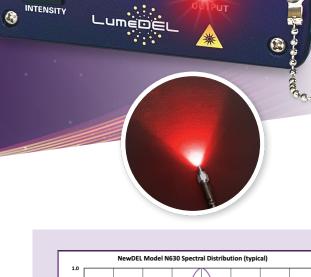


## Model N630 [Visible]

# NewDEL<sup>™</sup> 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<sup>™</sup> VIS fiber-coupled LED product group encompasses eight narrowband sources with center wavelengths ranging from 425 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 greenyellow spectral region.



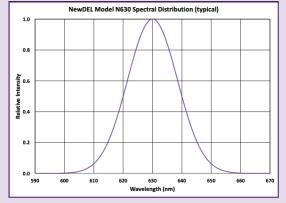
#### SPECIFICATIONS

- Central wavelength: 630 nm
- FWHM: 20 nm
- Recommended fiber patch cable: **FP63P**, High-OH, High NA Plastic Optical Fiber, NA 0.63
  - Optical power emitted (typical maximum): **160** mW
- SMA905 connector (FC option upon request)



#### APPLICATIONS

- fluorescence excitation of Cy5, Alex Fluor 633 and 635
- optogenetics activation of halorhodopsin "Jaws"
- photodynamic therapy
- photobiomodulation of bone metabolism and diabetic wound healing
- cerebral oxygenation monitoring



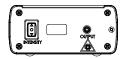


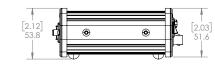
 500 N. Commercial St.

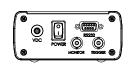
 Suite 502E

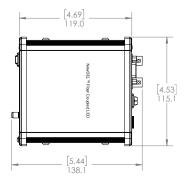
 Manchester, NH 03101

### **NewDEL™ Dimensions**









## NewDEL™ Specifications

| Optical coupling                         | SMA 905 type connector for multi-mode optical fibers with core diameters up to 1000 $\mu m$ (FC connector optional)  |
|--|--|
| Optical output power (typical)           | 160 mW   |
| Wavelength range                         | <b>630</b> nm  |
| Operating modes - Pulse Width Modulation | Default 490Hz Custom (user set) 1-500Hz  |
| Operating modes - Internal Trigger       | Set Pulse Delay 10ms – 32s<br>Set Pulse Duration 10ms – 32s  |
| Operating modes - External Trigger       | LED output controlled by 0-5V TTL  |
| Serial Interface                         | RS-232, DB-9 female<br>Converter cable RS-232 to USB-A (FTDI) is included  |
| Trigger connector                        | Optically isolated BNC, 50 Ohms for External Trigger mode<br>Cable not included  |
| Monitor connector                        | BNC, 50 Ohms for reading PWM or pulse waveform<br>Cable not included   |
| Manual operation                         | Front panel intensity switch for Pulse Width Modulation mode<br>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/