# 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 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 green-yellow spectral region.
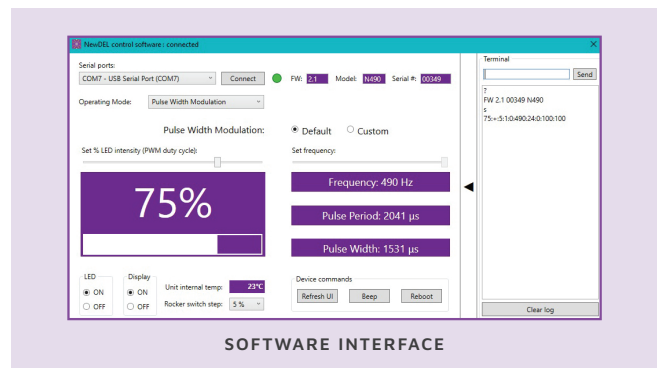
**FRONT PANEL**

**REAR PANEL**


NewDEL Model N680 Spectral Distribution (typical)
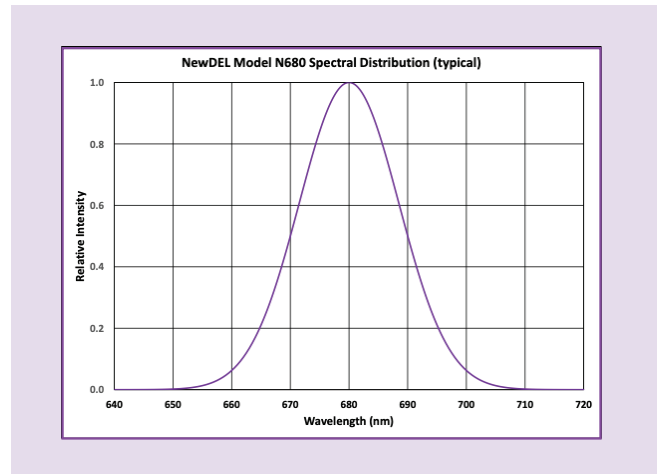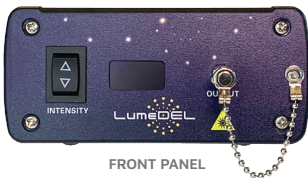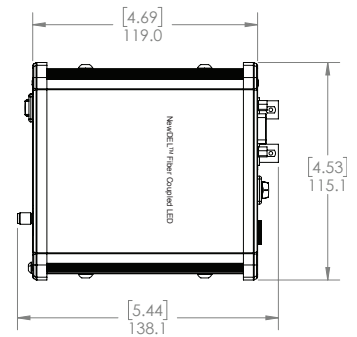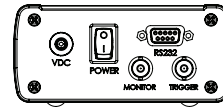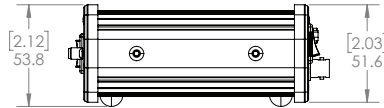
## SPECIFICATIONS

- Central wavelength: **680** nm
- FWHM: 20 nm
- Recommended fiber patch cable: **FP63P**, High-OH, High NA Plastic Optical Fiber, NA 0.63
  - Optical power emitted (typical maximum): **130** mW
- SMA905 connector (FC option upon request)

## APPLICATIONS

- Blood analysis
- Photodynamic therapy
- Algal bloom monitoring
- Palm oil ripeness
- Fluorescence guided surgery

**SOFTWARE INTERFACE**

**APTechnologies**
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# NewDEL™ Dimensions
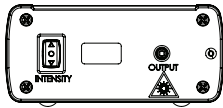


# NewDEL™ Specifications

| | |
|---|---|
| **Optical coupling** | SMA 905 type connector for multi-mode optical fibers with core diameters up to 1000 μm (FC connector optional) |
| **Optical output power (typical)** | **130** mW |
| **Wavelength range** | **680** 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



Fiberoptic Patch Cords

Collimating Lenses

Cables

Mounting Hardware

Power Adapters

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