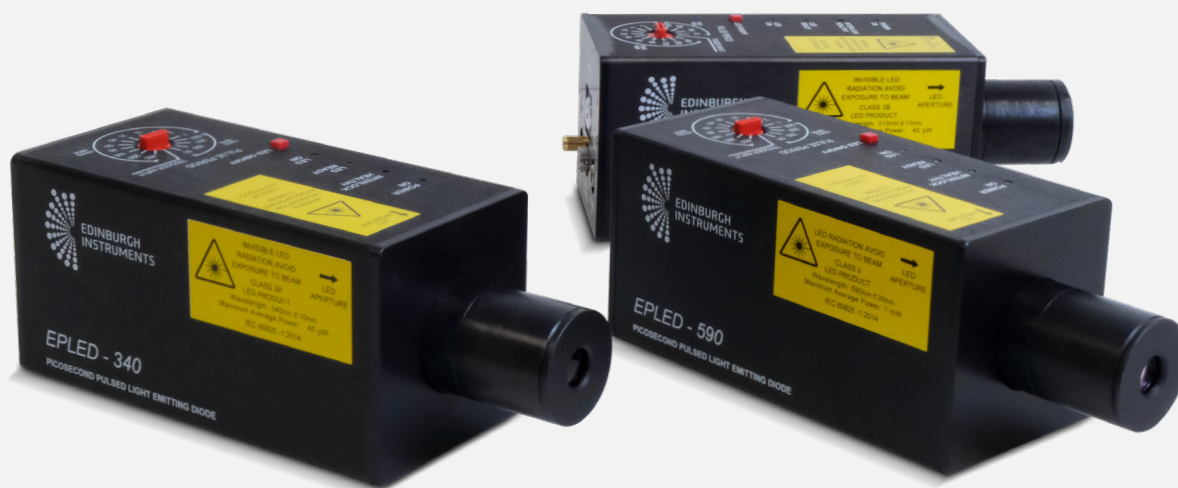


# EPLIED SERIES



Picosecond Pulsed UV & Vis LEDs



The EPLIED picosecond pulsed LEDs are ideal excitation sources for fluorescence lifetime measurements providing coverage in the UV and visible ranges.

In Time-Correlated Single Photon Counting (TCSPC) they bridge the gap between the nanosecond flashlamp and expensive mode-locked Titanium sapphire femtosecond lasers. In addition, their external trigger capability makes them suitable for standalone operation in a wide range of spectroscopy applications.

The EPLEDs are pre-adjusted for an optimum pulse width, with particular attention paid to reducing a long tail in the temporal profile.

EPLEDs are robust, maintenance free, easy to operate and have proprietary beam conditioning optics.

## KEY FEATURES

- + Optimised for TCSPC
- + 15 pre-set repetition frequencies from 2.5 KHz to 20 MHz
- + External trigger capability
- + Spectrally purified output
- + Fully integrated & compact design
- + Extremely low RF radiation
- + Optimised collimated beam
- + Drive electronics included



# SPECIFICATIONS

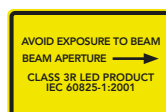
| UV Series         | Wavelength (nm $\pm$ 10 nm) | Typical Pulse Width (FWHM) (ps) | Maximum Pulse Width (FWHM) (ps) | Spectral Width (FWHM) (nm) | Typical Average Power @20 MHz ( $\mu$ W) |
|-------------------|-----------------------------|---------------------------------|---------------------------------|----------------------------|--|
| EPLED-250         | 250                         | 900                             | 1000                            | 10.5                       | 3.0                                      |
| EPLED-255         | 255                         | 890                             | 950                             | 11.0                       | 4.0                                      |
| EPLED-260         | 260                         | 900                             | 950                             | 10.5                       | 4.0                                      |
| EPLED-265         | 265                         | 850                             | 950                             | 10.5                       | 3.0                                      |
| EPLED-270         | 270                         | 890                             | 950                             | 10.0                       | 4.0                                      |
| EPLED-280         | 280                         | 880                             | 950                             | 10.0                       | 2.0                                      |
| EPLED-295         | 295                         | 1000                            | 1100                            | 10.0                       | 3.0                                      |
| EPLED-300         | 300                         | 1000                            | 1300                            | 10.0                       | 3.0                                      |
| EPLED-310         | 310                         | 910                             | 980                             | 10.5                       | 2.0                                      |
| EPLED-320         | 320                         | 880                             | 950                             | 11.0                       | 3.0                                      |
| EPLED-340         | 340                         | 1050                            | 1300                            | 10.0                       | 1.0                                      |
| EPLED-365         | 365                         | 900                             | 950                             | 13.0                       | 4.0                                      |
| EPLED-380         | 380                         | 990                             | 1050                            | 10.0                       | 2.0                                      |
| <b>VIS Series</b> |                             |                                 |                                 |                            |  |
| EPLED-560         | 563                         | 1500                            | 1750                            | 10.5                       | 0.15                                     |
| EPLED-570         | 572                         | 1350                            | 1600                            | 12.5                       | 0.35                                     |
| EPLED-590         | 590                         | 1300                            | 1600                            | 12.5                       | 0.35                                     |
| EPLED-610         | 610                         | 1250                            | 1400                            | 15.0                       | 2.00                                     |

|                                    |  |
|------------------------------------|--|
| <b>Laser Class</b>                 | Class 3B (EPLED-250 to EPLED-310), Class 3R (EPLED-320 to EPLED-380) or Class 2 (EPLED-560 to EPLED-610) |
| <b>Repetition Rate</b>             | MHz: 20, 10, 5, 2      kHz: 1000, 500, 200, 100, 50, 25, 20, 12.5, 10, 5, 2.5                            |
| <b>Bias Supply</b>                 | 15 Vdc +/- 5%, 15W (2.1mm DC jack)   |
| <b>Trigger Output</b>              | SMA, NIM Standard  |
| <b>Interlock Input</b>             | Hirose HR10A-7P-4P(73), (Link pin 1 and pin 2 to ground – interlock healthy)                             |
| <b>Trigger Input</b>               | Hirose HR10A-7P-4P(73), (Signal pin 4 and ground pin 3)  |
| <b>Trigger Input Signal</b>        | TTL > 50 ns pulse. Trigger on rising edge.<br>0.0 V < Low level < 0.5 V, 2.5 V < High level < 5 V        |
| <b>Key Switch</b>                  | Yes  |
| <b>Spectral Conditioning</b>       | Built-in filter to minimise out-of-band emission (no external spectral filtering needed)                 |
| <b>Physical Dimensions</b>         | Overall: 168 mm length x 64 mm x 64 mm<br>Collimator tube: $\varnothing$ 30 mm x 38 mm                   |
| <b>Tapped Holes for Stud Mount</b> | 2 x M6   |
| <b>Weight</b>                      | 800 g  |

Other wavelengths available upon request.

## CLASS 2/3R/3B LED PRODUCT

Avoid exposure to beam. Light emitted by the source may be harmful to the human eye and to skin. Please obey laser safety regulations. This product complies with the US federal laser product performance standards.



Customer support is available worldwide.

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All specifications are correct at the time of production. We reserve the right to change our specifications without notice.

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