

# The EPLED Series

NEW Picosecond Pulsed UV & VIS LEDs



EDINBURGH  
PHOTONICS

A division of  
Edinburgh Instruments Ltd.



Edinburgh Photonics is proud to present the all-new EPLED range of sub-nanosecond pulsed LED light sources. These picosecond pulsed LEDs are ideal excitation sources for a wide range of spectroscopy applications as well as being stand-alone modules. Standard wavelengths are available from 250nm – 380nm.

The EPLED picosecond pulsed LEDs are a new excitation source for fluorescence lifetime measurements. In Time Correlated Single Photon Counting (TCSPC), they bridge the gap between the nanosecond flashlamp and expensive mode locked titanium sapphire femtosecond lasers in the UV region.

The EPLEDs are pre-adjusted for an optimum pulse width, with particular attention paid to reducing a long tail in the temporal profile. The output has a guaranteed pulse width of less than 950ps.

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

## EPLED Product Features:

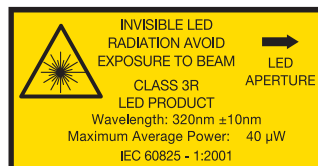
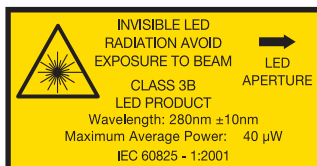
- Optimised for TCSPC
- 9 Pre-set Repetition Frequencies from 20KHz to 10MHz
- External Trigger Facility
- Spectrally Purified Output
- Fully Integrated & Compact Design
- Extremely Low RF Radiation
- Optimised Collimated Beam

## Technical Specifications

	Wavelength (nm±10nm)	Pulse Width (typical) (FWHM) (ps)	Pulse Width (Maximum) (FWHM) (ps)	Spectral Width (FWHM) (nm)	Average Power @10MHz (typical) (µW)
EPLED 250	250	700	950	11	0.4
EPLED 255	255	700	950	11	0.4
EPLED 260	260	700	950	11	0.4
EPLED 265	265	700	950	11	0.6
EPLED 270	270	700	950	11	0.8
EPLED 280	280	700	950	12	0.8
EPLED 290	290	700	950	11	0.8
EPLED 295	295	700	950	11	0.8
EPLED 300	300	700	950	10	0.8
EPLED 310	310	700	950	10	0.8
EPLED 320	320	700	950	12	0.8
EPLED 330	330	700	950	14	0.8
EPLED 340	340	700	950	14	0.8
EPLED 360	360	700	950	14	0.8
EPLED 380	380	700	950	14	0.8

Pulse Repetition Frequencies [MHz]	10	5	2	1	(KHz)	500	200	100	50	20
Pulse Period [ns]	100	200	500	1000	(µs)	2	5	10	20	50

Bias Supply	15 – 18Vdc, 15W (2.1mm DC jack)
Trigger Input	TTL Trigger input 1Hz – 10MHz, SMB
Trigger Output	SMA, NIM Standard
Interlock Input	SMC, (short circuit – interlock healthy)
Key Switch	Yes
Spectral Conditioning	Colour glass filter (interference filter on request)
Physical Dimensions	Overall: 168mm length x 64mm x 64mm. collimator tube: ø30mm x 38mm
Tapped Holes for Stud Mount	2 off M6
Weight	800g



### CLASS 3R/3B EPLED PRODUCT.

Avoid exposure to beam. Light emitted by the LED maybe 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, from the moment you enquire through to our post sales installation support.

For more information contact us at [sales@edinst.com](mailto:sales@edinst.com) or visit [www.edinburghphotonics.com](http://www.edinburghphotonics.com)

T: +44(0) 1506 425 300

F: +44(0) 1506 425 320

**Edinburgh Photonics**  
2 Bain Square,  
Kirkton Campus,  
Livingston,  
EH54 7DQ  
United Kingdom

**Telephone**  
+44(0) 1506 425 300  
**Facsimile**  
+44(0) 1506 425 320

**Email**  
[sales@edinst.com](mailto:sales@edinst.com)  
**Website**  
[www.edinburghphotonics.com](http://www.edinburghphotonics.com)



**EDINBURGH  
PHOTONICS**

A division of  
Edinburgh Instruments Ltd.