# pE-100 Single Wavelength LED Fluorescence Illumination

pE-100

# Ideal for Screening Fluorescence.

The pE-100 Series is a mercury-free family of compact and simple to use LED illumination systems developed for applications requiring a single LED excitation wavelength.



### www.CoolLED.com



# Specification



20 different LED wavelengths from the near-UV at 365nm to the near-IR at 770nm

# Configuration

There are three standard *p*E-100 configuration options:

## Direct-fit

pE-100 for connecting to a microscope by selecting from a range of microscope adaptors which cover all current and most older models. A simple once only adjustment will allow optimisation to the optical path of the microscope.

### Liquid Light Guide

pE-100<sup>light</sup> guide with a fixed 3mm diameter liquid light guide

#### Fiber

pE-100<sup>fiber</sup> with an SMA connection for accepting multimode fibers. The pE-100<sup>fiber</sup> has been designed with efficient coupling into a wide range of multimode fibers. The pE-100<sup>fiber</sup> also includes excitation filter holders.

### **Combination Configuration**

#### **Direct fit configuration**

pE-100 units can be combined using the pE-Combiner for applications requiring a second LED wavelength with independent control and triggering.

#### **Control & Interface**

| Manual:                                   | Manual control for instant on/off<br>and intensity control in<br>1% steps from 0 – 100%                            |
|---|--|
| Remote:                                   | Via single TTL for on/off control<br>using BNC connection on the<br>control pod. Triggering speed<br>approx. 150us |
| Power                                     |  |
| Power requirements:<br>Power consumption: | 100-240V a.c. 50/60Hz, 0.7A<br>2.2W (standby), 25W (full intensity)  |

#### Dimensions

*p*E-100 Light Source: *p*E-100<sup>fiber</sup>Light Source: Combined 2 x *p*E-100<sup>fiber</sup>: *p*E-100 Control Pod: pE-100 Power Supply:

60mm(w) x 170mm(d) x 70mm(h) - Weight 0.42kg pE-100<sup>light guide</sup> Light Source: 52mm(w) x 95mm(d) x 52mm(h) – Weight 0.42kg 76mm(w) x 165mm(d) x 80mm(h) - Weight 0.42kg 190mm(w) x 220mm(d) x 190mm (h) – Weight 1.5kg 102mm(w) x 110mm(d) x 50mm(h) - Weight 0.55kg 55mm(w) x 95mm(d) x 40mm(h) – Weight 0.19kg

#### To Order

| 244-87-XXX-YYY-ZZ:           | <i>p</i> E-100 direct fit Light Source, fixed collimating<br>adaptor to customer-specified microscope,<br>remote manual control pod, and power supply  |
|------------------------------|--|
| 244-87-XXX-L15-ZZ:           | <i>p</i> E-100 <sup>light guide</sup> Light Source with fixed 3mm<br>diameter, 1.5m long liquid light guide, remote<br>manual control pod, and power supply  |
| <i>p</i> E-100-F-XXX-ZZ:     | pE-100 <sup>fiber</sup> Light Source, remote manual control<br>pod, SMA fiber connection, and power supply<br>(no fiber provided)  |
| <i>p</i> E-100-F-XXX-XXX-ZZ: | Combination of two $p$ E-100 <sup>fiber</sup> Light Sources,<br>remote manual control pod, SMA fiber connection,<br>and power supply. Accepts 25mm diameter<br>excitation filters (fiber and filters not provided) |

To specify wavelength (XXX) see LED wavelengths (http://www.coolled.com/productdetail/led-wavelengths/). To specify microscope adaptor (YYY), see Adaptors (http://www.coolled.com/product-detail/adaptors-2/). To specify power cable (ZZ): 10 = Australia, 20 = Europe, 30 = UK, 40 = USA. For fiber options see Accessories under pE-100 (http://www.coolled.com/product-detail/pe-100/)

Warranty: System = 12 months, LEDs = 36 months

#### **Environment & Safety**

LED products are more sustainable and energy efficient than conventional illuminators. CoolLED's products have the following benefits:

Mercury-free

- Energy efficient: 80% less power
- Long lifetime (typically 25,000 operating hours)
- No bulb replacements • Reduced risk of eye damage
- Quiet operation
- No special disposal regulations



For more information on how CoolLED products can help you, contact us now: 1-800-877-0128 (USA/Canada)

- +44 (0)1264 323040 (Worldwide)
- www.CoolLED.com w:

info@CoolLED.com e:





### www.CoolLED.com