

# pE-300<sup>white</sup>

Broad Spectrum  
Fluorescence  
Excitation



Clean Bright Illumination

**CoolLED**  
Simply Better Control



[www.CoolLED.com](http://www.CoolLED.com)

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### Advantages of pE-300<sup>white</sup>

- Broad spectrum, high power white illumination
- Simple to fit, simple to use
- Instant on/off
- Excellent field of view
- No bulb replacement or aligning
- Long lifetime (25,000 operating hours)
- Reduced power consumption for energy saving
- No shutters or ND filters required
- Filter set compatibility, including DAPI
- Stable and repeatable
- Quiet operation
- Fits all new and most older microscopes
- TTL triggering
- Mercury-free

### Simply better control

The manual control pod offers instant on/off operation with 0-100% intensity control in 1% steps. The pE-300<sup>white</sup> is ideal for use with multi-band filter sets providing simplicity of operation with fewer filter cubes – potentially removing the need for single band filter sets altogether. It allows you to control the brightness of each fluorophore independently, in a multi-stained sample. Fluorophores can be viewed in isolation or in combination without filter cube changes. Application example: FISH



CoolLED's pE-300<sup>white</sup> illumination system is designed to offer broad spectrum LED illumination for regular use in fluorescence applications.

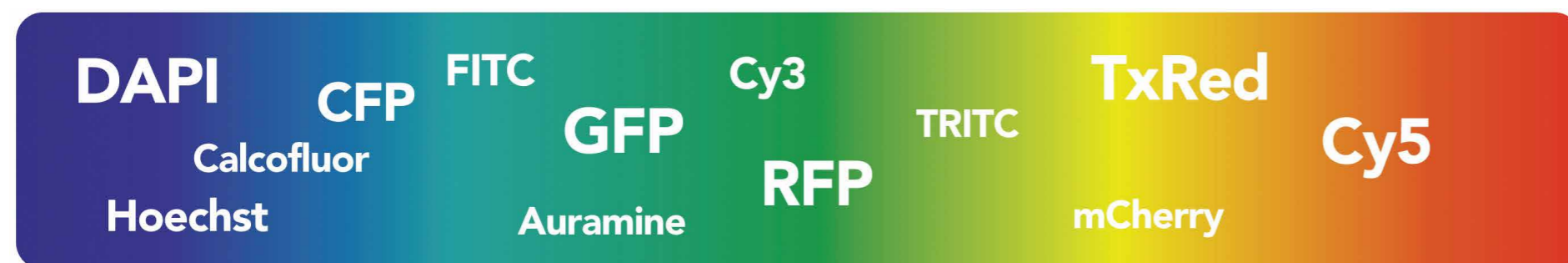
The illumination system can be fitted directly to the microscope as a better and safer alternative to a high-pressure mercury or metal-halide illuminator. Spectral coverage is from the UV (DAPI excitation) to the Red region (Cy5 excitation). The illumination system will excite common fluorophores used in hospital and research laboratory environments.

With a comprehensive range of microscope adaptors, the pE-300<sup>white</sup> can be fitted to most microscopes. The result is a safe, convenient illumination system which will last for many years without any additional operating costs.

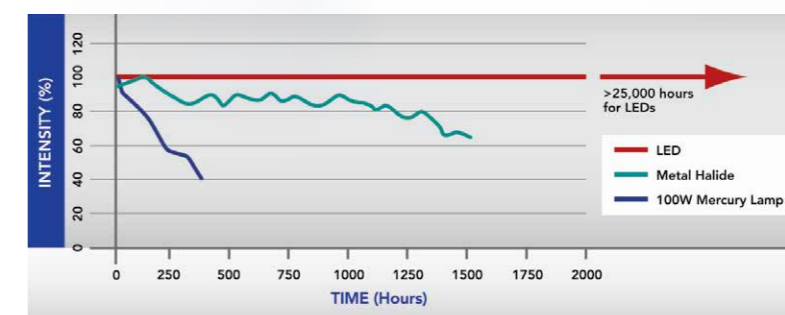
### Liquid Light Guide Option

The pE-300<sup>white</sup> can be supplied with a liquid light-guide when there is a need to keep the source of illumination remote from the microscope. The optional pE-Universal Collimator is available if required. As a replacement to a metal-halide source on a confocal microscope, it can be used for pre-aligning samples before scanning commences. This is particularly attractive as photo-bleaching of the sample can be minimised when LED illumination is used.

Some of the many fluorophores excited by the pE-300<sup>white</sup>

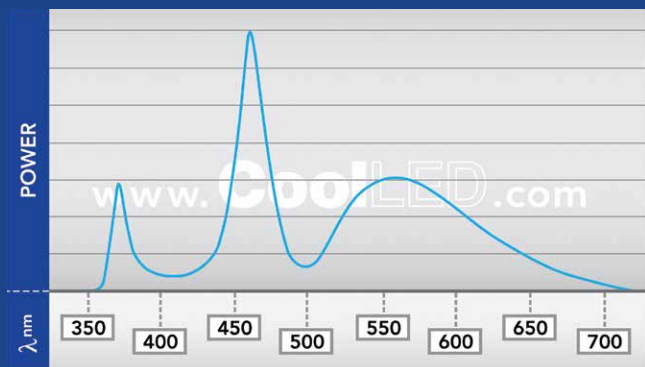


### LEDs last longer



## Specification

### Performance:



Typical power values for the pE-300<sup>white</sup> configured to match SINGLE BAND FILTER SETS. Powers measured at sample plane of research grade microscope using 100% mirror in cube and 10X objectives. Due to a programme of continual development, performance values may change. Correct at time of print.

| UV    | Blue   | GYR (Green/Yellow/Red) |
|-------|--------|------------------------|
| 40 mW | 450 mW | 410 mW                 |

For those considering using the pE-300<sup>white</sup> with MULTI-BAND FILTER SETS, please refer to further information on the CoolLED website <http://www.cooled.com/product-detail/pe-300white/>

## Control & Interface

|                      |  |
|----------------------|--|
| <b>Manual:</b>       | Manual control pod                                   |
| <b>Remote:</b>       | Single TTL for on/off control. Switching speed <30uS |
| <b>Connectivity:</b> | USB (B type) for PC connection                       |

## Power

|                            |                                       |         |
|----------------------------|---------------------------------------|---------|
| <b>Power requirements:</b> | 110-240Va.c. 50/60Hz, 2A              |         |
| <b>Power consumption:</b>  | Standby Max 2W                        |         |
|                            | White (all 3 bands) at 100% intensity | Max 80W |
|                            | 2 bands at 100 % intensity            | Max 63W |
|                            | 1 band at 100% intensity              | Max 38W |

## Dimensions

|                      |                               |               |
|----------------------|-------------------------------|---------------|
| <b>Light Source:</b> | 77mm(w) x 186mm(d) x 162mm(h) | Weight 1.40kg |
| <b>Control pod:</b>  | 88mm(w) x 125mm(d) x 37mm(h)  | Weight 0.32kg |
| <b>Power Supply:</b> | 167mm(w) x 67mm(d) x 35mm(h)  | Weight 0.62kg |

## To Order

|                              |   |
|------------------------------|---|
| <b>pE-300-W-D-SB-YYY-ZZ:</b> | Light source configured for SINGLE BAND FILTER SETS, control pod, power supply      |
| <b>pE-300-W-L-SB-YYY-ZZ:</b> | Light source configured to SINGLE BAND FILTER SETS, control pod, power supply       |
| <b>pE-300-W-D-MB-YYY-ZZ:</b> | Light source configured for MULTI-BAND FILTER SETS, control pod, power supply       |
| <b>pE-300-W-L-MB-YYY-ZZ:</b> | Light source configured to MULTI-BAND FILTER SETS, control pod, power supply        |
| <b>pE-1904:</b>              | 3mm diameter, 1m long liquid light guide  |
| <b>pE-1908:</b>              | 3mm diameter, 3m long liquid light guide  |
| <b>pE-10400:</b>             | Universal collimator for use with a liquid light guide. Requires additional adaptor |
| <b>pE-ADAPTOR-YYY:</b>       | Microscope Adaptor to customer-specified microscope                                 |

To specify microscope adaptor (YYY), see Adaptors (<http://www.cooled.com/product-detail/adaptors-2/>)

To specify local power cable (ZZ): 10 = Australia, 20 = Europe, 30 = UK, 40 = USA

|                  |                                      |
|------------------|--------------------------------------|
| <b>Warranty:</b> | 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 (25,000 operating hours)
- No bulb replacements
- Reduced risk of eye damage
- Quiet operation
- No special disposal regulations or issues



For more information on how CoolLED products can help you, contact us now:

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