



## PRODUCT DATASHEET

# CoolLED pE-100-WHT

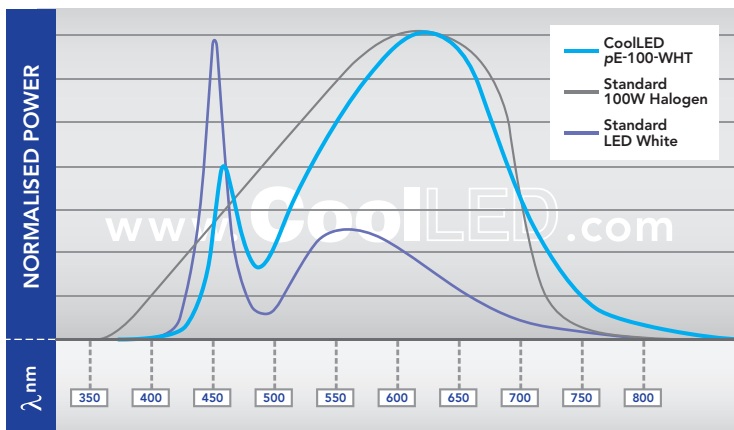
## 100W Halogen Replacement

The pE-100-WHT LED light-source has been designed as a direct replacement to the 100W Halogen lamp. It offers greater power and consistent white colour balance across all intensities. The product offers all the benefits of LED illumination – instant On/Off, control, stability, and repeatability – with a spectral performance matched to 100W Halogen. Lifetime will exceed 50,000 hours of on-time without the need to replace or align bulbs.

Each unit comprises an LED head with specified fitting to your microscope, a control pod which accepts a BNC input for TTL trigger, and a universal power supply. The pE-100 can replace the 100W Halogen lamp housing on most current and older microscopes.



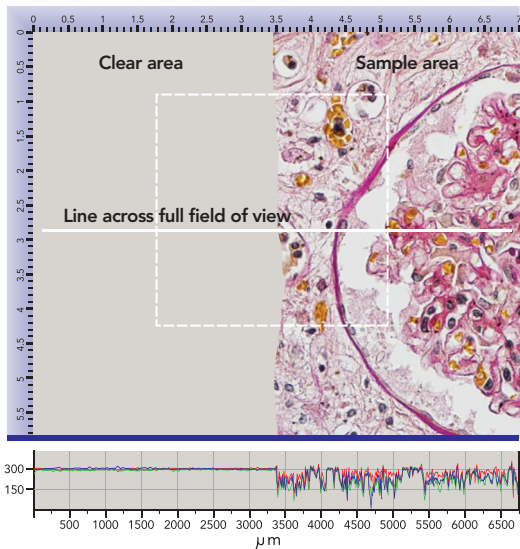
### SPECTRAL COMPARISON



CoolLED uses a new LED technology which has a spectrum closely matched to that of a 100W Halogen lamp resulting in samples looking identical between the pE-100-WHT and 100W Halogen. This is a major improvement over standard white LEDs which, due to their significant differences in spectrum, cause samples containing reds and pinks to lose their colour clarity. Intensity can be up to five times greater than a Halogen lamp with the pE-100-WHT.

A particular benefit is that there is no need to colour balance when varying intensity as the colour spectrum remains constant over the full intensity range. In addition, the pE-100-WHT does not produce unwanted illumination in the UV region which makes it a safer product for the user as risk of damage to eyes is significantly lower.

### INTENSITY PROFILE

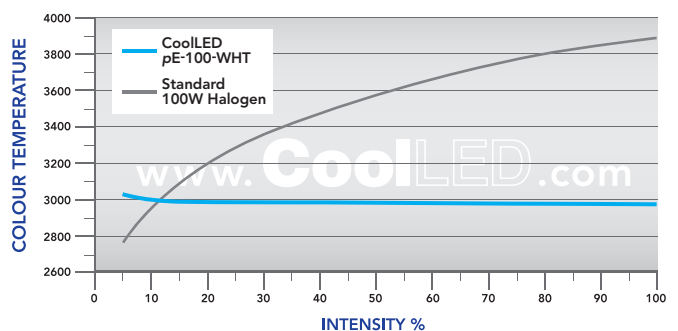


Excellent homogeneity is achieved across the full Field of View

### COLOUR VALUES

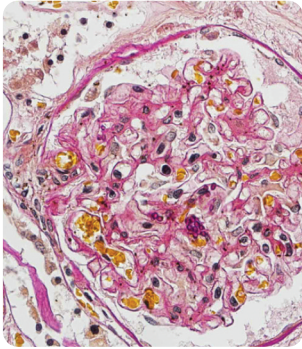
Correlated colour temperature (CCT) and colour rendering index (CRI) values are shown opposite. The pE-100-WHT has been designed to match the standard settings of the 100W Halogen lamp.

pE-100-WHT Values	
CRI-Ra	>90
CCT	≈3000K

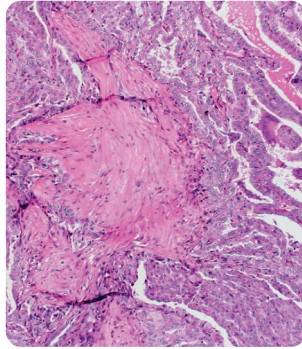


Colour balance remains stable with pE-100-WHT

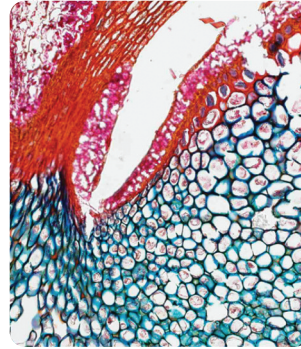
▶ IMAGES TAKEN USING pE-100-WHT



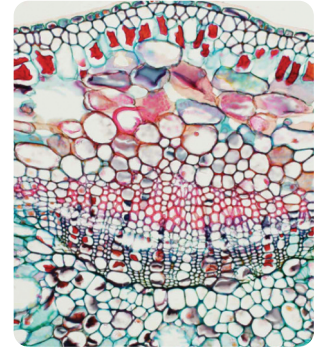
Kidney with Candida Infections. 40x OBJ



Thyroid Gland. 10x OBJ



Roskastanie Knospe. 20x OBJ



Podocarpus Elatus Leaf. 20x OBJ

▶ TO SPECIFY

**pE-100-WHT-YYY-ZZ**

YYY = Microscope fitting

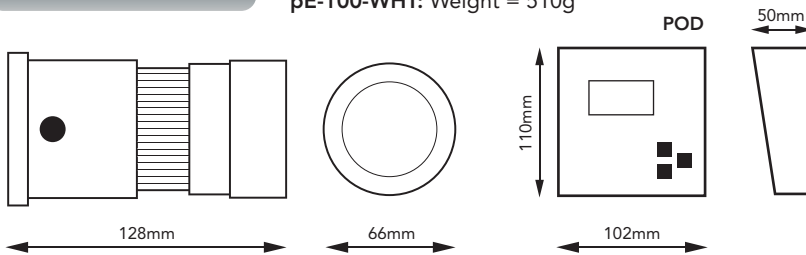
ZZ = Power cable

Specify microscope adaptor "YYY" from CoolLED's extensive list.  
See website:  
[www.coolled.com/Life-Sciences-Analytical/Clinical/Microscope-Adaptors/](http://www.coolled.com/Life-Sciences-Analytical/Clinical/Microscope-Adaptors/)

10 – Australia  
20 – Europe  
30 – UK  
40 – USA

▶ DIMENSIONS

pE-100-WHT: Weight = 510g



▶ PRODUCT DETAILS

**Control:** Instant On/Off  
0-100% Intensity in 1% steps  
TTL trigger via BNC

**Power Consumption:**  
1W (idle) 20W (full intensity)

**Input:**  
100-240V AC, 50/60 Hz

**Operation:** 22 dBA spl

▶ ENVIRONMENT & SAFETY

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

- No Mercury
- Long lifetime
- Reduced risk of eye damage
- Energy Efficient: 80% less power
- No bulb replacements
- No special disposal regulations



▶ CONTACT



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**NO MORE MERCURY!**



**CoolLED**