



## PRODUCT DATASHEET

# CoolLED pE-100-WHT

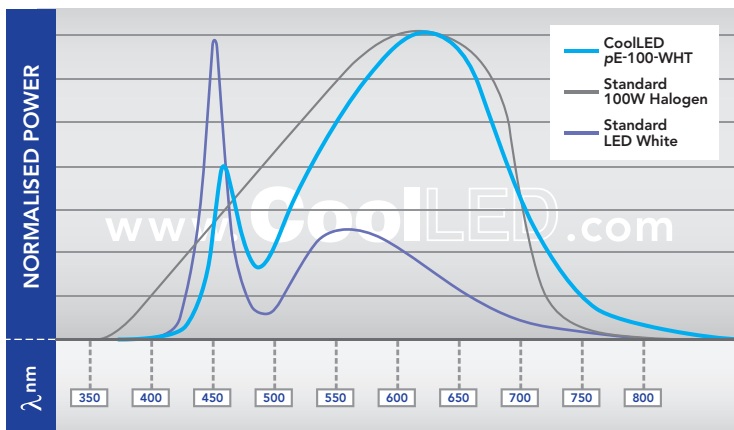
## 100W Halogen Replacement

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.



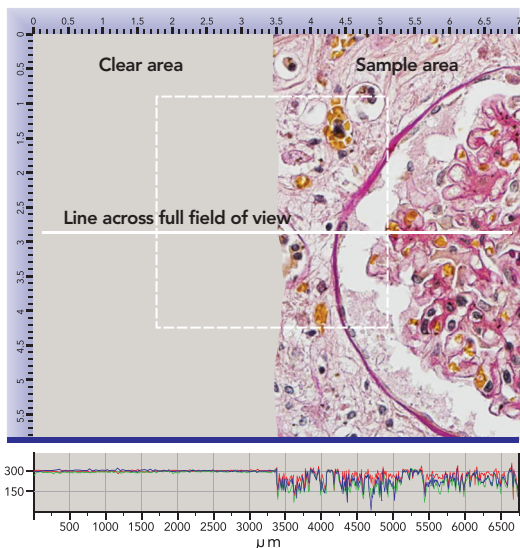
### SPECTRAL COMPARISON



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.

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

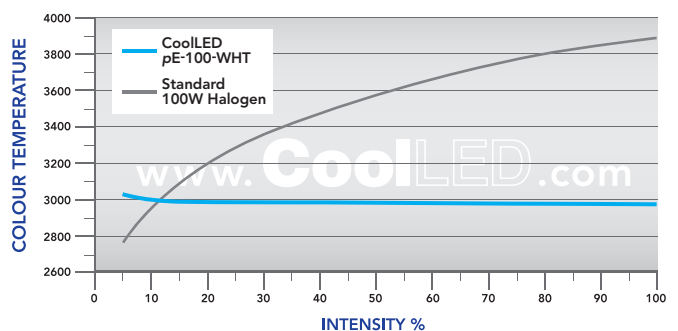


Excellent homogeneity is achieved across the full Field of View

### COLOUR VALUES

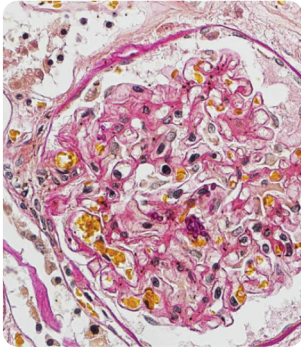
Correlated colour temperature (CCT) and colour rendering index (CRI) values are shown opposite. The pE-100-WHT has been designed to match the standard settings of the 100W Halogen lamp.

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

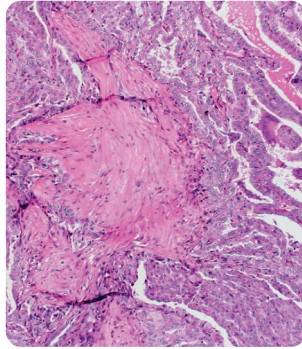


Colour balance remains stable with pE-100-WHT

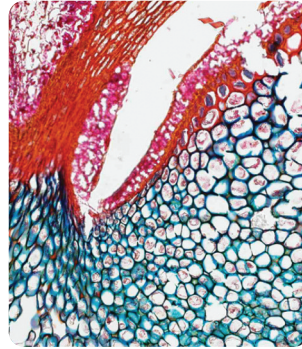
▶ IMAGES TAKEN USING pE-100-WHT



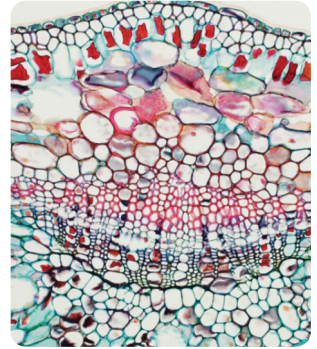
Kidney with Candida Infections. 40x OBJ



Thyroid Gland. 10x OBJ



Roskastanie Knospe. 20x OBJ



Podocarpus Elatus Leaf. 20x OBJ

▶ TO SPECIFY

pE-100-WHT-YYY-ZZ

YYY = Microscope fitting

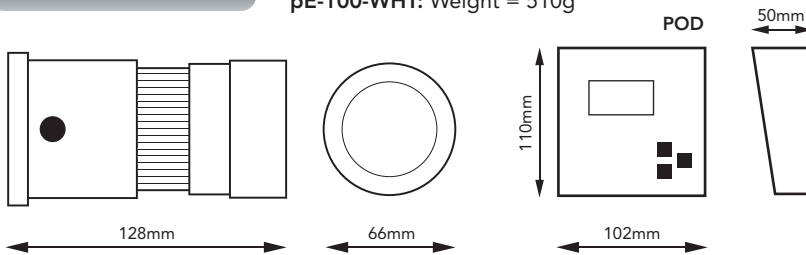
ZZ = Power cable

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**