pT-100

Optimised Transmitted Light LED Illumination

LED Solution for Transmitted Light Applications - brightfield, darkfield, DIC, Phase Contrast and more...

CoolLED
Simply Better Control

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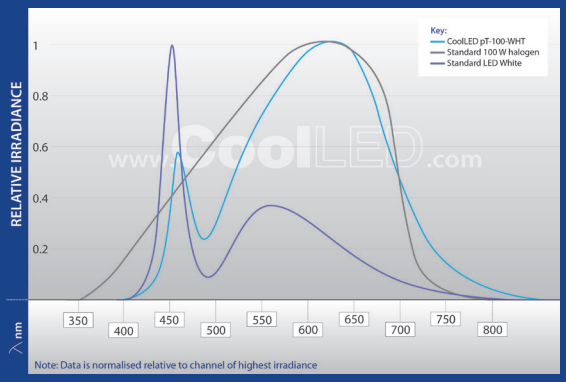
The pT-100 is an LED solution for transmitted illumination. There are four variants available: one broad white output (**pT-100-WHT**), and three narrower bandwidths (**pT-100-525, pT-100-635, pT-100-770**).

pT-100-WHT

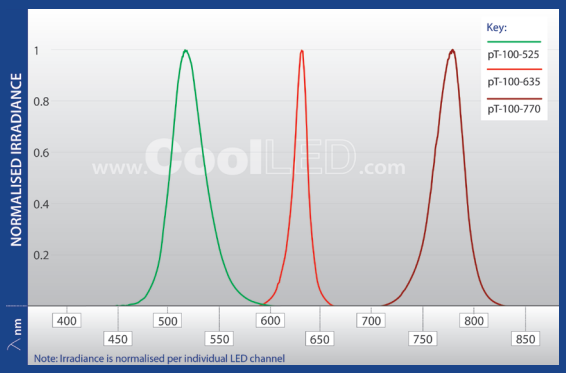


The **pT-100-WHT** is a powerful white LED illumination system designed to replace a 100 W halogen lamp. Histologists and cytologists who are familiar with results from a conventional halogen lamp can immediately make accurate and reliable diagnoses using the pT-100-WHT as colours will appear the same. Unlike a halogen lamp, the colour balance of the pT-100-WHT Illumination System does not vary with intensity, removing the need to make any adjustment. This variant is available with direct fit or liquid light guide delivery.

pT-100-WHT Values	
Colour Rendering Index (CRI-Ra)	>90
Correlated Colour Temperature (CCT)	~ 3000 K

The pT-100-WHT has been designed to match the standard settings of the 100 W halogen lamp.

pT-100-525, pT-100-635, pT-100-770



pT-100-525 provides phosphor-free illumination centred around 525 nm, a bandwidth which is optimised for the spectral response of most scientific cameras. This allows switching between standard brightfield and fluorescence imaging without the fear of background from a phosphored LED. The pT-100-525 will allow you to achieve great contrast from both brightfield and fluorescence imaging. This variant is available with direct fit light delivery.

pT-100-635 provides a phosphor-free solution for brightfield imaging. Illuminating with a peak of 635 nm, it provides deeper penetration, excellent for revealing detail in thicker samples. The slightly longer wavelength is less likely to stimulate or damage light sensitive samples. This variant is available with direct fit light delivery.

pT-100-770 is the specialised solution for IR contrast techniques such as DIC, Dodt contrast etc. Centred around 770 nm, this longer wavelength Illumination System provides optimal output for deeper sample penetration techniques that require the use of infrared light. This provides greater detail from thicker samples giving increased experimental benefits. This variant is available with direct fit or liquid light guide delivery

Control & Interface

Manual: Manual control for instant on/off and intensity control in 1 % steps from 0-100 %

Remote: Via single TTL for on/off control using a BNC connection on the control pod. Triggering speed <150 µs

Attachment: Direct fit via adaptor for all major microscopes

Liquid light guide delivery option available for WHT & 770 nm variants

Power

Power requirements: 100-240 V a.c. 50/60 Hz, 0.7A
Power consumption: 1 W (standby), 20 W (full intensity)

Dimensions

pT-100 Light Source: 66 mm (diameter) x 128 mm (l) / Weight 0.42 kg
pT-100- LG Light Source (WHT & 770 nm only): 66 mm (diameter) x 130 mm (l) / Weight 0.43 kg
pT-100 Control Pod: 102 mm (w) x 110 (d) x 50 mm (h) / Weight 0.55 kg
pT-100 power supply: 55 mm (w) x 95 mm (d) x 40 mm (h) / Weight 0.19 kg

To Order

pT-100-XXX-YYY-ZZ: pT-100 Illumination System includes direct fit Light Source, interchangeable microscope adaptor to customer specified microscope, Control Pod, and power supply.

pT-100-XXX-L15-ZZ: pT-100 Illumination System includes Light Source, Control Pod, 1.5 m long, 3 mm diameter liquid light guide and power supply. Select from 770 nm or WHT (White) Transmitted Illumination ONLY

pT-100-XXX-L3-ZZ: pT-100 Illumination System includes Light Source, Control Pod, 3 m long, 3 mm diameter liquid light guide, and power supply. Select from 770 nm or WHT (White) Transmitted Illumination ONLY

pE-10400-YYY: Universal Collimator & customer specified adaptor

To specify wavelength (XXX): WHT, 525, 635, 770. To specify microscope adaptor (YYY), see Adaptors (https://www.coolled.com/product-detail/adaptors-new/) To specify power cable (ZZ): 10 = Australia, 20 = Europe, 30 = UK, 40 = USA

Warranty: System Warranty: 36 months
LED Warranty: 36 months

Environment & Safety

LED products help laboratories become more sustainable, saving energy and reducing the carbon footprint when compared with conventional illuminators. CoolLED's products have the following benefits:

- Mercury-free and laser-free
- Energy Efficient
- Long lifetime
- No bulb replacements
- Quiet operation
- No special disposal regulations or issues
- Reduced risk of eye damage. Care should be taken when viewing samples using the microscope eyepiece while the transmitted light source is switched on. Users should select the lowest intensity setting on the pod before using the eyepiece and increase intensity as necessary.

Scan here to find us on WeChat

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

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