

LAMBDA TLED/TLED+ LED TRANSMITTED LIGHT SOURCE

The **Lambda TLED and TLED+** are stand-alone LED light sources that can be used with the transmitted light path of a microscope or in other applications with similar requirements.

This basic system consists of an LED mounted on a special black-anodized aluminum heat sink and a controller. The **Lambda TLED and TLED+** controllers are powered by a rugged modular universal power supply. The controllers provide intensity control and on-off control via a toggle switch or TTL logic. The on-off time is <25µsecs when using TTL control. In addition to digital input control, the **Lambda TLED+** has analog input to modulate the LED intensity. The **Lambda TLED and TLED+** are expected to have stable output that will last in excess of 50,000 hours.

The **Lambda TLED and TLED+** can be ordered with a high-output white light LED, making it a suitable light source for contrast methods, including Phase, and Differential Interference Contrast (DIC).

As an alternative to the standard white-light LED, we have several options available including an IR-LED which is suitable for experiments requiring IR-DIC. Please contact Sutter for details.

Our dual channel **Lambda TLED+** option that combines high power LED's into a single light path. The **Lambda TLED-DC** includes a 460nm LED for stimulation, while the second channel passes the phosphor emission from a white light LED. The white light channel can be used to access spectra between 510nm to 630nm and is suitable for a variety of applications. Both channels are driven by individual TLED+ controllers and can be triggered, also individually, by a TTL signal. Alternate wavelength configurations are available.

Each **Lambda TLED/TLED+** system includes an optical mounting adapter for the microscope and detailed installation instructions. Mounting adapters are designed to fit most models of Nikon, Olympus, Zeiss and Leica microscopes. Custom adapters for the **Lambda TLED/TLED+** are available at an additional cost.

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Lambda TLED Single channel light source

Wavelengths: White, 460nm, 530nm, 624nm, 740nm, 850nm, 940nm

TLED-N Lambda TLED for Nikon

TLED-N40 Lambda TLED for Nikon E400/E600
TLED-N50 Lambda TLED for Nikon AZ100
TLED-N65 Lambda TLED for Nikon FN1
TLED-Y Lambda TLED for Olympus
TLED-Z Lambda TLED for Zeiss
TLED-L Lambda TLED for Leica
TLED-C Lambda TLED with C-mount

Lambda TLED+ Single channel light source

Wavelengths: White, 365nm, 385nm, 460nm, 530nm, 630nm

TLEDPLUS-N
TLEDPLUS-Y
TLEDPLUS-Z
TLEDPLUS-L
TLEDPLUS-L
Lambda TLED+ for Nikon
Lambda TLED+ for Olympus
Lambda TLED+ for Zeiss
Lambda TLED+ for Leica

Lambda TLED-DC Dual channel light source

Wavelengths: White and 385nm, 385nm and 530nm, 530nm and 630nm White and 460nm, 460nm and 630nm

TLED-DC-NDual Channel Lambda TLED for NikonTLED-DC-YDual Channel Lambda TLED for OlympusTLED-DC-ZDual Channel Lambda TLED for ZeissTLED-DC-LDual Channel Lambda TLED for Leica

Lambda TLED-RBG light source

TLED-RGB-N Lambda TLED-RGB for Nikon
TLED-RGB-Y Lambda TLED-RGB for Olympus

