# **TECHNOLOGY**

# Light ▼ CHAPTERS

**Coherent Sources** 

# **Incoherent Sources**



# **Drivers/Mounts**

Accessories

# ▼ SECTIONS

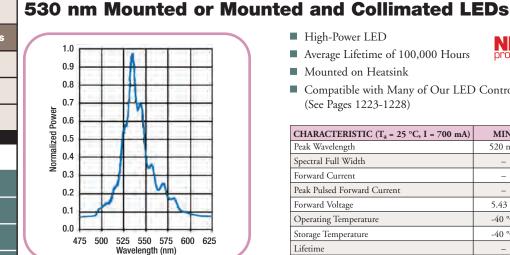
**Mounted LEDs** 

**Unmounted LEDs** 

SLDs

**ASE Sources** 

Lamps





#### Mounted LED, P = 275 mW

- Uncollimated, Lambertian Radiation Pattern.
- Internally SM1 Threaded

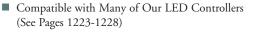


# Collimated LED, P = 55 - 67 mW

- Closely Collimated Beam
- High Power Density
- Adjustable Focus
- Designed to Integrate Into Standard Microscopes

| ITEM#  | MICROSCOPE              | POWER | BEAM   | BEAM AREA            |
|--------|-------------------------|-------|--------|----------------------|
| LEDC13 | Olympus BX/IX           | 67 mW | Ø50 mm | 1963 mm <sup>2</sup> |
| LEDC14 | Leica DMI               | 55 mW | Ø37 mm | 1075 mm <sup>2</sup> |
| LEDC15 | Nikon Eclipse (F Mount) | 59 mW | Ø43 mm | 1452 mm <sup>2</sup> |
| LEDC16 | Zeiss Axioskop          | 59 mW | Ø44 mm | 1521 mm <sup>2</sup> |

- High-Power LED
- Average Lifetime of 100,000 Hours
- Mounted on Heatsink





Typical Emitter

| CHARACTERISTIC (T <sub>a</sub> = 25 °C, I = 700 mA) | MIN    | ТҮР         | MAX     |
|-----------------------------------------------------|--------|-------------|---------|
| Peak Wavelength                                     | 520 nm | 530 nm      | 550 nm  |
| Spectral Full Width                                 | -      | 60.8 nm     | -       |
| Forward Current                                     | -      | -           | 700 mA  |
| Peak Pulsed Forward Current                         | -      | -           | 1000 mA |
| Forward Voltage                                     | 5.43 V | 6.84 V      | 8.31 V  |
| Operating Temperature                               | -40 °C | -           | 120 °C  |
| Storage Temperature                                 | -40 °C | _           | 120 °C  |
| Lifetime                                            | -      | 100,000 hrs | -       |

Mounted LEDs that provide light output at 530 nm are available with or without collimation optics. Both types of units use the same LED with EEPROM, which is housed in an internally SM1threaded housing. The mounted LED can be easily incorporated into lens tube or cage systems via the SM1 threading. The collimated versions house an optic in a microscope-compatible adapter that can be easily installed into the epi-illumination port of many microscopes made by Leica, Nikon, Zeiss, or Olympus.

**NEW** products

#### Drivers

We recommend using either the LEDD1A T-Cube driver or the DC2100 LED driver to control the LED. The T-Cube version is compact and offers basic controls for current and toggling between CW or pulsed operation. When pulsing the LED, an external trigger must be connected to the T-Cube's BNC connection. Please note that a power supply is not included with our T-Cubes, but the TPS001 single-channel power supply is available below.

The DC2100 is a more sophisticated controller that is capable of CW or pulsed operation up to 10 kHz. If an external trigger is used, pulse frequency can be increased up to 100 kHz. Additionally, the DC2100 can read the LED's EEPROM, which contains operating parameters, such as the maximum current that help to prolong the life of the LED. Please see pages 1223-1228 for more details on these drivers as well as other compatible drivers.





|     | ITEM#                                                  |    | \$       |   | £        |   | €        |   | RMB       | DESCRIPTION                                                              |
|-----|--------------------------------------------------------|----|----------|---|----------|---|----------|---|-----------|--------------------------------------------------------------------------|
| NEW | M530L1                                                 | \$ | 127.50   | £ | 88.40    | € | 113,20   | ¥ | 1,076.70  | 530 nm, 275 mW, Mounted LED                                              |
| _   | LEDC13                                                 | \$ | 331.50   | £ | 229.90   | € | 294,40   | ¥ | 2,799.20  | 530 nm, 67 mW, Collimated LED for Olympus BX/IX Microscopes              |
|     | LEDC14                                                 | \$ | 331.50   | £ | 229.90   | € | 294,40   | ¥ | 2,799.20  | 530 nm, 55 mW, Collimated LED for Leica DMI Microscopes                  |
|     | LEDC15                                                 | \$ | 331.50   | £ | 229.90   | € | 294,40   | ¥ | 2,799.20  | 530 nm, 59 mW, Collimated LED for Nikon Eclipse<br>(F Mount) Microscopes |
|     | LEDC16                                                 | \$ | 331.50   | £ | 229.90   | € | 294,40   | ¥ | 2,799.20  | 530 nm, 59 mW, Collimated for Zeiss Axioskop Microscopes                 |
|     | LEDD1A*                                                | \$ | 269.00   | £ | 186.50   | € | 238,90   | ¥ | 2,271.50  | T-Cube LED Driver, 1000 mA                                               |
|     | TPS001                                                 | \$ | 25.00    | £ | 17.40    | € | 22,20    | ¥ | 211.20    | T-Cube Power Supply                                                      |
| NEW | DC2100                                                 | \$ | 1,750.00 | £ | 1,213.00 | € | 1.553,50 | ¥ | 14,778.00 | High-Power LED Driver with Modulation, 2000 mA                           |
|     | * Power supply sold separately see TPS001 or page 1104 |    |          |   |          |   |          |   |           |                                                                          |

supply sold separately, see TPS001 or page 1104