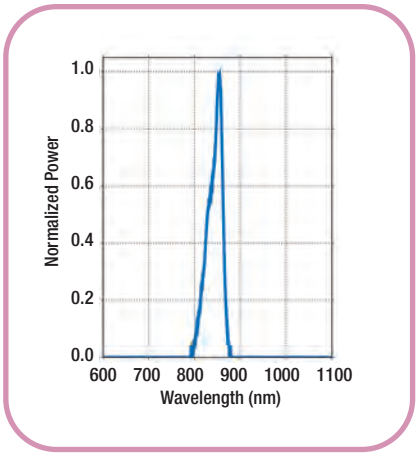
850 nm Mounted or Mounted and Collimated LEDs



- High-Power LED
- Average Lifetime of 500 Hours
- Mounted on Heatsink
- Compatible with Many of Our LED Controllers (See Pages 1223-1228)

NEW products


Typical Emitter

CHARACTERISTIC (T_a = 25 °C)	MIN	TYP	MAX
Peak Wavelength	–	850 nm	–
Spectral Full Width	–	80 nm	–
Forward Current	–	–	700 mA
Forward voltage	–	4.4 V	–
Operating Temperature	-40 °C	–	120 °C
Storage Temperature	-40 °C	–	120 °C
Lifetime	–	500 hrs	–

Mounted LED, P = 400 mW

- Uncollimated, Lambertian Radiation Pattern.
- Internally SM1 Threaded


LEDC51

Collimated LED, P = 97 - 117 mW

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

ITEM#	MICROSCOPE	POWER	BEAM	BEAM AREA
LEDC49	Olympus BX/IX	117 mW	Ø50 mm	1963 mm^2
LEDC50	Leica DMI	97 mW	Ø37 mm	1075 mm^2
LEDC51	Nikon Eclipse (F Mount)	102 mW	Ø43 mm	1452 mm^2
LEDC52	Zeiss Axioskop	103 mW	Ø44 mm	1521 mm^2

Thorlabs offers 850 nm mounted LEDs with or without collimation optics. Both types of units use the same LED with EEPROM, which is housed in an internally SM1-threaded 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.

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.


LEDD1A

DC2100

ITEM#	$	£	€	RMB	DESCRIPTION
M850L1	$ 127.50	£ 88.40	€ 113,20	¥ 1,076.70	850 nm, 400 mW, Mounted LED
LEDC49	$ 350.00	£ 242.70	€ 310,80	¥ 2,955.50	850 nm, 117 mW, Collimated LED for Olympus BX/IX Microscopes
LEDC50	$ 350.00	£ 242.70	€ 310,80	¥ 2,955.50	850 nm, 97 mW, Collimated LED for Leica DMI Microscopes
LEDC51	$ 350.00	£ 242.70	€ 310,80	¥ 2,955.50	850 nm, 102 mW, Collimated LED for Nikon Eclipse (F Mount) Microscopes
LEDC52	$ 350.00	£ 242.70	€ 310,80	¥ 2,955.50	850 nm, 103 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
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.