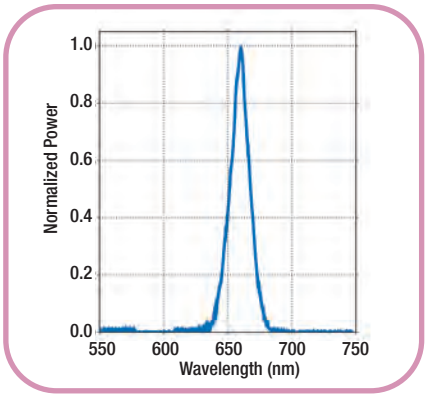
660 nm Mounted or Mounted and Collimated LEDs



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


Typical Emitter

CHARACTERISTIC (T_a = 25 °C)	MIN	TYP	MAX
Peak Wavelength	658 nm	660 nm	670 nm
Spectral Full Width	–	33.2 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	–

Thorlabs offers 660 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.

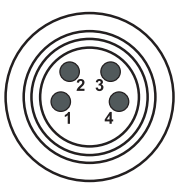
Mounted LED, P = 850 mW

- Uncollimated, Lambertian Radiation Pattern
- Internally SM1 Threaded


LEDC45

Collimated LED, P = 302 - 366 mW

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



Pin	Description
1	LED +Ve
2	LED -Ve
3	Not Connected
4	Not Connected

NEW products

ITEM#	MICROSCOPE	POWER	BEAM	BEAM AREA
LEDC45	Olympus BX/IX	366 mW	Ø50 mm	1963 mm²
LEDC46	Leica DMI	302 mW	Ø37 mm	1075 mm²
LEDC47	Nikon Eclipse (F Mount)	320 mW	Ø43 mm	1452 mm²
LEDC48	Zeiss Axioskop	323 mW	Ø44 mm	1521 mm²

ITEM#	$	£	€	RMB	DESCRIPTION
M660L1	$ 127.50	£ 88.40	€ 113,20	¥ 1,076.70	660 nm, 850 mW, Mounted LED
LEDC45	$ 350.00	£ 242.70	€ 310,80	¥ 2,955.50	660 nm, 366 mW, Collimated LED for Olympus BX/IX Microscopes
LEDC46	$ 350.00	£ 242.70	€ 310,80	¥ 2,955.50	660 nm, 302 mW, Collimated LED for Leica DMI Microscopes
LEDC47	$ 350.00	£ 242.70	€ 310,80	¥ 2,955.50	660 nm, 320 mW, Collimated LED for Nikon Eclipse (F Mount) Microscopes
LEDC48	$ 350.00	£ 242.70	€ 310,80	¥ 2,955.50	660 nm, 323 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 NEW

* Power supply, see TPS001 or page 1104