

For current pricing,  
please see our website.

# T-Cube LED Controller

## Features

- Easy-to-Use LED Driver
- 3 Operation Modes
  - Constant Current
  - Modulation
  - Trigger
- Compact T-Cube Footprint (60 mm x 47 mm x 60 mm)
- Pulse Width and Frequency Controllable via External 0 - 5 V Signal
- Adjustable LED Current Limit



**LEDD1B**  
(15 VDC Power Supply Sold Separately)

SPECIFICATIONS	
Output Current	0 - 1200 mA
Forward Voltage	11 V (Min), 12 V (Typical)
Modulation Mode	0 - 5 kHz, Sine Wave
Trigger Frequency*	0 - 1 kHz
Power Supply Required	15 VDC
Operating Temperature	0 to 40 °C
Storage Temperature	-40 to 70 °C
Physical Size	60 mm x 47 mm x 60 mm (2.36" x 1.85" x 2.36")
Physical Size with Baseplate	60 mm x 73 mm x 104 mm (2.36" x 2.87" x 4.09")


\*Dependent on Forward Voltage and Capacitance of Connected LED

The T-Cube LEDD1B driver is a variable intensity, compact LED driver designed to drive high-power LEDs with currents up to 1200 mA, such as the ones on pages 1319 - 1321.


The output current can be limited by a trim potentiometer on the front, ensuring that the output current will not exceed the limit, regardless of the other settings or the modulation input voltage.

The LEDD1B driver offers three operation modes: constant current mode, trigger mode, and modulation mode. The trigger and modulation modes are controlled via an external 0 to 5 V signal. In the modulation mode, the LED current output follows the amplitude and waveform of the input signal. A TTL input triggers the preset LED output current in the trigger mode, which is useful for pulse width modulation (PWM).

The LEDD1B is shipped attached to a removable base plate, which allows the T-Cube to be easily secured to an optical table. Please note that our T-Cubes do not include a power supply, but two power supply options are available below. Although the T-Cube hub can be used to power the LEDD1B, this driver does not support remote operations via the USB 2.0 hub interface.



**LED Interface Pin Connections**



- 1 LED Anode
- 2 LED Cathode
- 3 Unused
- 4 Unused

ITEM #	\$	£	€	RMB	DESCRIPTION
LEDD1B	\$ 284.00	£ 204.48	€ 247.08	¥ 2,263.48	T-Cube LED Driver, 1200 mA Drive Current (Max)

## T-Cube LED Controller Power Supply Options

The LEDD1B can be powered using a TPS001 Single T-Cube Power Supply or the TCH002 T-Cube Hub and Power Supply. The TPS001 plugs into a standard wall outlet and provides +15 VDC. The TCH002 Hub and Power Supply consists of

two parts: the hub, which can support up to six standard-footprint T-Cubes, and a power supply that plugs into a standard wall outlet and powers the hub, which in turn powers all the T-Cubes connected to the hub.

### Power Supply for a Single T-Cube Controller

- Provides +15 VDC



Location-Specific Adapter Provided

### T-Cube Hub

- Provides Power for up to Six T-Cubes



ITEM #	\$	£	€	RMB	DESCRIPTION
TPS001	\$ 25.00	£ 18.00	€ 21.75	¥ 199.25	15 V Power Supply Unit for a Single T-Cube
TCH002	\$ 726.90	£ 523.37	€ 632.40	¥ 5,793.39	T-Cube™ Controller Hub and Power Supply Unit