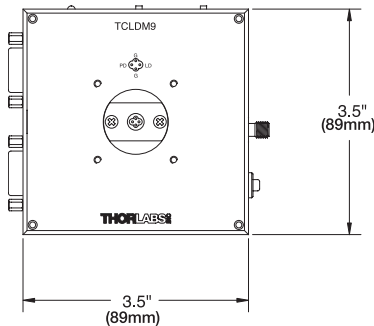


## Mounts for 5.6mm & 9mm Laser Packages



TCLDM9

See Our Selection of ER-Series Cage Assembly Rods, Page 227



The TCLDM9 mount is ideal for temperature-controlled operation of all 3-pin and 4-pin laser diodes in 9mm (TO-18) and 5.6mm (TO-46) packages, as well as our fiber-coupled pigtailed lasers. It includes a Bias-T for RF modulation of the laser current up to 500MHz, and can be easily integrated into any existing optical setup. The mount can be adapted to the polarity of the laser and monitor diodes by miniature switches located at the top. User-protection features of the TCLDM9 mount include an LED that indicates an enabled laser located along the top, and a remote interlock connector located on the side.

The bottom surface features #8-32 and M4 mounting holes, and the front plate features tapped holes to mount our ER-Series Cage Assembly Rods.

A laser diode can be changed quickly and easily simply by inserting the laser diode into the socket according to the imprinted pin assignment, and fastening the clamp ring with two screws. The diode socket is located very close to the front of the cold plate, making the connection of short lead devices easier. The pass-through design of the socket allows installation of long lead diodes (up to 3/4") without trimming.

Laser protection features include optional grounding configurations, and the "TEC Lockout" circuit\* that prevents the laser from being enabled when the TEC controller is inactive. The built-in TE cooler facilitates temperature-controlled operation of the laser diode, which is protected against air drafts by the clamp ring.

\*TEC Lockout only functions with Thorlabs lasers and TEC controllers and can be easily bypassed if not required.

### Specifications

- **Laser Diode Package:** 5.6mm & 9mm
- **Maximum Laser Current:** 2A
- **DC Input Resistance:** 1Ω
- **Polarity of Laser Diode:** Selectable
- **Polarity of Monitor Diode:** Selectable
- **Maximum RF Power:** 200mW, RMS
- **Modulation Frequency (Bias-T):** 0.2-500MHz
- **RF Input Resistance (Bias-T):** 50Ω
- **Maximum TEC Current:** 5A
- **Temperature Sensor:** AD592, 10kΩ Thermistor
- **Temperature Range (at 25°C with 2A TEC Current):** 5-70°C

ITEM #	\$	£	€	RMB	DESCRIPTION
TCLDM9	\$ 432.00	£ 272.20	€ 401.80	¥ 4,125.60	TEC LD Mount, 5.6mm & 9mm laser packages

\*Universal Design is Imperial & Metric Compatible

## Miniature TEC-Cooled Laser Diode Mount



LDM21  
Optics and Adapter  
Not Included

The LDM21 Miniature TEC-Cooled Laser Diode Mount measures half the size of our TCLDM9 mount, and is capable of accepting both 5.6mm and 9mm laser diode packages.

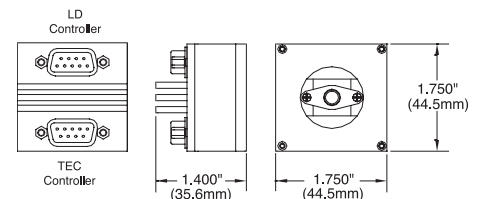
With an integrated thermal electric cooler element and a 10kΩ thermistor, this mount keeps laser wavelengths stabilized by precisely holding the case temperature to within 0.002°C.

The small size of the LDM21 makes this mount ideal for optical setups where space is limited. Completely compatible with our extensive line of laser diode and TEC controllers, this mount can operate with all standard laser diode pin configurations.

The front side of the mount has a standard 1.035-40 thread, making it compatible with our SM1 Series of optical components and allowing for the addition of collimating or focusing optics. The back side of the mount accepts DB9 inputs from a laser current source and TEC controller.

### Specifications

- **Laser Diode Package:** 5.6mm & 9mm
- **Maximum Laser Current:** 1A
- **Polarity of Laser Diode:** Selectable
- **Polarity of Monitor Diode:** Selectable
- **Maximum TEC Current:** 5A
- **Temperature Sensor:** 10kΩ Thermistor
- **Temperature Range:** 20-30°C
- **Laser Interface:** Female DB9
- **Temperature Interface:** Male DB9



See Our SM1 Accessories on Page 207

ITEM #	\$	£	€	RMB	DESCRIPTION
LDM21	\$ 299.00	£ 188.40	€ 278.10	¥ 2,855.50	Miniature TEC-Cooled Laser Diode Mount

\*Universal Design is Imperial & Metric Compatible