

# 854x Laser Diode Mount Series Specifications

This series covers the offering of Laser Diode Mounts (LDM) for use with Continuous LIV Test Solutions. The following products: 2400-LV/2420/2440, 2500/2502, and 2510/2510AT are recommended for use with these products.

## PRODUCTS

The following lists the current products in the 854x Laser Diode Mount Series.

- 8542 Dual In-Line Laser Diode Mount Bundle (includes one 8542-301A and CA-321-1A)
- 8544 Butterfly Laser Diode Mount Bundle (includes one 8542-301A and CA-321-1A)
- 8544-TEC Butterfly Laser Diode Mount Bundle (includes one 8542-301A and CA-322-1A)

## ACCESSORIES

- 2400-LV/2420/2400 SourceMeter® Instruments<sup>1</sup>
- 2500/2502 Dual Photodiode Meter
- 2510/2510AT TEC SourceMeter® Instruments (AT: Auto Tune feature)

## REFERENCED MOUNT SPECIFICATIONS

### Laser Diode Package

Model	8542	8544	8544-TEC
Socket	DIL 14 pin	Butterfly 14 pin	Butterfly 14 pin
Base Plate	Position adjustable	0.1 centers	0.1 centers

### Laser Temperature Control

TEMPERATURE RANGE: 0°C to +80°C

SENSOR TYPE<sup>2</sup> (Model 8544-TEC Only): 10 kΩ Thermistor, AD592CN

## CONNECTOR/CABLE ASSEMBLY SIGNALS

Laser Diode Control 8542-301A			Single Temperature Control Cable CA-321-1A				Dual Temp. Control Cable CA-322-1A	
DB9	24x0 / 2500	Function	DB15	Wire Color	2510	Function	2- 2510s	Function
1			1	Yellow	TEC+ Out	TE HI (A)	TEC+ Out (1)	TE HI (A)
2	Triax Inner Shield <sup>3</sup>		2	Green	S+ Out	TE HI (A)	S+ Out (1)	TE HI (A)
3	24x0 GND Screw	Chassis GND	3	Red	TEC- Out	TE LO (A)	TEC- Out (1)	TE LO (A)
4	4 Wire Sense LO	Laser Cathode	4	Black	S- Out	TE LO (A)	S- Out (1)	TE LO (A)
5	In/Out LO	Laser Cathode	5					
6	Triax Outer Shield	PD Cathode	6					
7	Triax Signal	PD Anode	7	White Orange	F+ In, S+ In	Sensor HI (A)	F+ In, S+ In (1)	Sensor HI (A)
8	4 Wire Sense HI	Laser Anode	8	Blue Brown	F- In, S- In	Sensor LO (A)	F- In, S- In (1)	Sensor LO (A)
9	In/Out HI	Laser Anode	9	Yellow			TEC+ Out (2)	TE HI (B) <sup>4</sup>
			10	Green			S+ Out (2)	TE HI (B) <sup>4</sup>
			11	Red			TEC- Out (2)	TE LO (B) <sup>4</sup>
			12	Black			S- Out (2)	TE LO (B) <sup>4</sup>
			13					
			14	White Orange			F+ In, S+ In (2)	Sensor HI (B) <sup>4</sup>
			15	Blue Brown			F- In, S- In (2)	Sensor LO (B) <sup>4</sup>

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## GENERAL SPECIFICATIONS

### RECOMMENDED MAXIMUM RATINGS<sup>5</sup>:

Drive Current (Amps): 2

Measured Voltage (Volts): 3

**WEIGHT<sup>6</sup>:** 1.0 lbs (0.45 kg).

**DIMENSIONS<sup>6</sup>:** 1.25(32) x 3.75(95) x 5.5 (140)

### Notes

1. The other SourceMeter® offerings from Keithley, 2400, 2410, 2425, and 2430 are not recommended for use with the 8542-301 and Laser Diode Mounts unless proper interlock and safety precautions are observed (esp. voltage protection).
2. The 8544-TEC unit is shipped with the 10 kΩ Thermistor wired. This is the more common requested configuration. The AD592CN sensor wires are available but not connected.
3. The Triax inner shield is available on pin 2 of 8542-301A. This will allow flexibility for the customer to exchange the wire in the LDM from pin 6 to pin 2.
4. To use the second 2510 (DB-15 pins 9-15), the customer must internally wire the 8544-TEC Mount to the DUT thermocouple. See Quick Start Guide for wiring configuration.
5. Applies Ratings based on use of Mount with provided Cables and average majority of laser diode characteristics.
6. The weight and dimension is the mounting unit without the cables.