8542, 8544, **8544-TEC**

- Compatible with Keithley laser diode LIV test solutions
- Simplifies configuration of LIV test systems
- Choice of three fixture designs, all with necessary cables
- Cables also available separately
- Ambient temperature control on **TEC version**

Ordering Information

- 8542 Dual In-Line (DIL) Telecom Laser Diode Mount Bundle with 8542-301 and CA-321-1 cables
- 8544 Butterfly Telecom Laser Diode Mount Bundle with 8542-301 and CA-321-1 cables

8544-TEC **Butterfly Telecom Laser Diode Mount Bundle with** TEC, thermistor, and AD592CN temperature sensor, with 8542-301 and CA-322-1 cables

8542-301

LIV Cable to connect Model 2500 and 24XX to the fixture, 1.8m (6 ft.) (supplied with 8542, 8544, and 8544-TEC)

CA-321-1

Temp Control Cable to connect Model 2510 to fixture, 1.8m (6 ft.) (supplied with 8542 and 8544)

CA-322-1

Dual Temp Control Cable to connect (2) Model 2510 to fixture, 1.8m (6 ft.) (supplied with 8544-TEC)

Laser Diode Mounts for LIV Test Systems



The 854X Laser Diode Mount Series makes it easier than ever to configure a complete laser diode LIV test system for continuous wave test applications. These fixtures provide highly stable temperature control for all telecommunications laser diodes. They offer an easy-to-use platform for testing laser diodes used in telecommunications. They are designed to speed and simplify setting up test systems for all laser diode/photodiode/ thermoelectric cooler/thermistor configurations.

Three different fixture bundle designs are available, all of which are compatible with Keithley's popular laser diode LIV test systems. Each bundle includes all cabling required to connect the test instrumentation to the test fixture. Cables are also available separately.

All 14 pin DIL and butterfly laser packages can be mounted on the 854X Series. For higher power butterfly packages without integral thermoelectric coolers (TECs), the Model 8544-TEC offers a TEC and both thermistor and AD592CN sensors.

APPLICATIONS

 Continuous wave laser diode LIV characterization

Specifications

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

LASER TEMPERATURE CONTROL

TEMPERATURE RANGE: 0° to +80°C.

SENSOR TYPE 2 (Model 8544-TEC Only): 10kQ thermistor, AD592CN.

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

ACCESSORIES AVAILABLE

2400-LV/2420/2440	SourceMeter Instruments ¹
2502	Dual Photodiode Meter
2510/2510AT	TEC Control Meters (AT: Auto Tune feature)

GENERAL

RECOMMENDED MAXIMUM RATINGS⁵:

Measured Voltage (Volts): 3.

WEIGHT6: 1.0 lbs (0.45 kg)

DIMENSIONS6: 32mm high \times 95mm wide \times 140mm deep $(1.25 \text{ in } \times 3.75 \text{ in } \times 5.5 \text{ in}).$

NOTES

- The other SourceMeter offerings from Keithley, Models 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 (especially voltage protection).
- 2. The 8544-TEC unit is shipped with the $10k\Omega$ thermistor wired. This is the more commonly requested configuration. The AD592CN sensor wires are available but not connected.
- 3. The triax inner shield is available on pin 2 of the 8542-301A. This will allow flexibility for the customer to exchange the wire in the LDM from pin 6 to pin 2.
- To use the second 2510 (DB-15 pins 9–15), the customer must internally wire the 8544-TEC Mount to the DUT thermocouple. See the Quick Start Guide for wiring configuration.
- 5. Ratings are 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.

-aser diode fixtures for LIV test systems

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Drive Current (Amps): 2.