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LC-500 Laser Current/TEC Controller

- . Combined laser current and TEC control
- . State-of-the-art low noise performance
- . 500 mA current capacity

Available as a standalone unit or with a narrow-linewidth DBR laser and mount.

Pricing:

LC-500 Standalone Unit - \$2400

Compatible laser modules and packages available for this unit and can be seen in the laser modules and packages tab.

LC-500 specs:

Laser Controller Specs:

Current Source:

Current Range 0-500 mA
Current Noise Density $< 200 \text{ pA}/\sqrt{\text{Hz}}$
RMS Noise (10Hz-100kHz) $< 100 \text{ nA}$
RMS Noise (10Hz-1MHz) $< 150 \text{ nA}$
RMS Noise (10Hz-10MHz) $< 500 \text{ nA}$
Monitor Resolution (Display) .1 mA
Absolute Accuracy 2 %
Temperature Coefficient $< 1 \mu\text{A}/\text{C}$

Current Servo Input:

Input Impedance 1000Ω

Bandwidth > 10 MHz
Modulation Coefficient 1 mA/V
Input Modulation Range ± 10 V
RF Input Bandwidth 0.5 to > 3000 MHz

TEC Specs

Temperature Control Output Current: up to ± 3.0 A
Temperature Stability: 0.00009 C (10 k Ω thermistor at 25 C) over one hour
Stability Across Ambient: 0.002 C (10 k Ω thermistor at 25 C) over one hour