

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

THORLABS

ThorLabs TLD001 T-Cube Laser Diode Driver

ThorLabs Motion Controllers. Resolution: 10 μ A, Resolution: 1 μ W, Resolution: 10 μ A (14-bit).



MODEL

ThorLabs TLD001

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

TLD001

LISTING

<https://aumictechlabs.com/products/tld001-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The ThorLabs TLD001 T-Cube Laser Diode Driver is a compact instrument for precise control of laser diodes and LEDs across laboratory and research environments. Operating in constant current or constant power modes, it delivers up to 200 mA with 10 μ A resolution and supports analog modulation via ± 10 V input. The unit features a 5-digit display, front-panel adjustment potentiometer, and safety enable key switch for manual operation, alongside full USB control via included Kinesis® software and legacy APT™ packages. An interlock facility and 14-bit measurement resolution ensure reliable laser protection and accuracy. Measuring 120 mm $\times$ 60 mm $\times$ 47 mm, it mounts directly to optical tables and integrates with K-Cube™ Controller Hubs and the TTC001 TEC controller. Temperature stability is ≤ 70 ppm/ $^{\circ}$ C typical, with laser diode current noise 8 V LD current setting resolution: 10 μ A LD power setting resolution: 1 μ W LD current/power measurement resolution: 10 μ A (14-bit) Temperature drift: ≤ 70 ppm/ $^{\circ}$ C (typical) LD current noise: ≤ 3 μ A RMS (typical) Modulation input range: -10 V to $+10$ V Operating modes: Constant current, constant power Key Features Manual control via 5-digit display, mode button, laser on button, and safety key switch Adjustable current limit via front-panel key slot USB interface (Mini-B to Type A cable included) with PC-based control Analog control input for modulation Interlock

facility for system safety Compact 120 mm × 60 mm × 47 mm footprint Typical Applications Laser diode and LED precision control in laboratory and research settings requiring stable, reliable operation with accurate current or power regulation. Compatibility & Integration T-Cube family member compatible with APT™ Controllers. Works with TTC001 TEC controller, K-Cube™ Controller Hubs (KCH301, KCH601), and Thorlabs laser diode mounts (LDM21, LM14S2). Power supply sold separately; TPS002 supports up to two T-Cubes. Includes Kinesis® software and ActiveX® programming interfaces.

Features & description

From manufacturer datasheet

ThorLabs TLD001 — Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the ThorLabs TLD001. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1–3 business days after receipt. Standard Cal Pass/fail cert + NIST sticker Cal with Data Full NIST cert with measured values [Request Calibration](#) → [Request Repair Quote](#) →

ThorLabs TLD001 price

This ThorLabs TLD001 is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

ThorLabs TLD001 calibration cost

NIST-traceable calibration for the ThorLabs TLD001 is (standard — pass/fail certificate and calibration sticker) or (full measured data at every test point, reference standards documented, traceability chain included). Turnaround is 1 to 3 business days after receipt. See full calibration details →

Unit notes

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TLD001 Specifications

PARAMETER	VALUE
Voltage / Current Range	>8 V compliance, ±10 V modulation input, 0-200 mA

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

ThorLabs Motion Controllers. Resolution: 10 μ A, Resolution: 1 μ W, Resolution: 10 μ A (14-bit).

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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
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<https://aumictechlabs.com>

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.