

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

THORLABS

Thorlabs Profile TED 8020 Controller Module QTY 1

The Thorlabs TED 8020 is a controller module designed for precise temperature control in various applications. It offers stable and accurate temperature regulation with user-friendly interface for easy setup and monitoring.



MODEL

ThorLabs TED 8020

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

TED 8020

LISTING

<https://aumictechlabs.com/products/ted-8020-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Thorlabs Profile TED 8020 Controller Module is a single-slot temperature control module engineered for the PRO8 mainframe platform. It delivers precise thermal regulation of thermoelectric coolers (TECs) in laser diode and photonics applications, stabilizing sensitive components including laser diodes and nonlinear crystals with configurable PID control and hardware current limiting. Technical Specifications Output current: ± 2 A maximum Maximum output power: 16 W (cooling or heating) Measurement resolution: 16-bit; 0.07 mA (ITE) Temperature sensor compatibility: Thermistors (20 k Ω or 200 k Ω selectable), AD590/AD592 IC sensors, LM335 transducers. Variants support PT-100 (TED8020-PT) and PT-1000 (TED8020-Kryo) sensors Control loop: PID (Proportional-Integral-Derivative) Module type: Single-slot for PRO8 mainframe Weight: Approximately 0.95 kg Key Features User-configurable PID parameters

for control loop tuning Hardware TEC current limit settable as absolute limit Polarity checking and voltage detection for TEC element connection IEEE 488 computer interface for remote control and communication Fast settling times for rapid target temperature achievement High temperature control accuracy and stability Typical Applications Laser diode temperature stabilization Nonlinear crystal thermal regulation Advanced optoelectronic testing and control Photonics component thermal management Compatibility & Integration Mainframe: PRO8000 and PRO800 series Laser diode mounts: Requires CAB420-15 cable (1.5 m length) Integration: Compatible with LDC8080 Laser Diode Control Module when higher laser drive current is required

Features & description

From manufacturer datasheet

Technical Specifications

Output current: ± 2 A maximum Maximum output power: 16 W (cooling or heating) Measurement resolution: 16-bit; 0.07 mA (ITE) Temperature sensor compatibility: Thermistors (20 k Ω or 200 k Ω selectable), AD590/AD592 IC sensors, LM335 transducers. Variants support PT-100 (TED8020-PT) and PT-1000 (TED8020-Kryo) sensors Control loop: PID (Proportional-Integral-Derivative) Module type: Single-slot for PRO8 mainframe Weight: Approximately 0.95 kg

Key Features

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Compatibility & Integration

Mainframe: PRO8000 and PRO800 series Laser diode mounts: Requires CAB420-15 cable (1.5 m length) Integration: Compatible with LDC8080 Laser Diode Control Module when higher laser drive current is required

ThorLabs TED 8020 — Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the ThorLabs TED 8020. 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 TED 8020 price

This ThorLabs TED 8020 is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

ThorLabs TED 8020 calibration cost

NIST-traceable calibration for the ThorLabs TED 8020 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 →

Applications

Laser diode temperature stabilization Nonlinear crystal thermal regulation Advanced optoelectronic testing and control Photonics component thermal management

Unit notes

The Thorlabs Profile TED 8020 Controller Module is a single-slot temperature control module engineered for the PRO8 mainframe platform. It delivers precise thermal regulation of thermoelectric coolers (TECs) in laser diode and photonics applications, stabilizing sensitive components including laser diodes and nonlinear crystals with configurable PID control and hardware current limiting. Technical Specifications Output current: ± 2 A maximum Maximum output power: 16 W (cooling or heating) Measurement resolution: 16-bit; 0.07 mA (ITE) Temperature sensor compatibility: Thermistors (20 k Ω or 200 k Ω selectable), AD590/AD592 IC sensors, LM335 transducers. Variants support PT-100 (TED8020-PT) and PT-1000 (TED8020-Kryo) sensors Control loop: PID (Proportional-Integral-Derivative) Module type: Single-slot for PRO8 mainframe Weight: Approximately 0.95 kg Key Features User-configurable PID parameters for control loop tuning Hardware TEC current limit settable as absolute limit Polarity checking and voltage detection for TEC element connection IEEE 488 computer interface for remote control and communication Fast settling times for rapid target temperature achievement High temperature control accuracy and stability Typical Applications Laser diode temperature stabilization Nonlinear crystal thermal regulation Advanced optoelectronic testing and control Photonics component thermal management Compatibility & Integration Mainframe: PRO8000 and PRO800 series Laser diode mounts: Requires CAB420-15

TED 8020 Specifications

PARAMETER	VALUE
Voltage / Current Range	±2 A, 16 W maximum
Output current	±2 A maximum Maximum output power: 16 W (cooling or heating) Measurement resolution: 16-bit; 0.07 mA (ITE) Temperature sensor

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.

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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.