

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

COHERENT

Coherent Laser Power Sensor

The Coherent T251P-2C is a laser diode designed for various industrial and scientific applications. It delivers reliable and consistent optical output. Its compact design allows for easy integration into existing systems. Aumictech offers NIST-traceable calibration and repair for the Coherent T251P-2C. Calibration covers wavelength accuracy at 5 or more points across the full tuning range, mode-hop-free range, output power flatness, linewidth, and side-mode suppression ratio (SMSR). All calibrations ship with a NIST-traceable certificate. Turnaround is typically 1–3 business days after receipt. Common Coherent T251P-2C faults: output power drift, mode hops, fiber pigtail connector damage, wavelength inaccuracy. Common faults include output power drift after extended use, mode hops at specific wavelengths, and fiber pigtail connector damage. Full alignment and piezo calibration typical



MODEL

Coherent T251P-2C

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

T251P-2C

LISTING

<https://aumictechlabs.com/products/t251p-2c-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Coherent T251P-2C is a laser diode designed for various industrial and scientific applications. It delivers reliable and consistent optical output. Its compact design allows for easy integration into existing systems. Technical Specifications * Product Name: Coherent T251P-2C Product Type: Laser Diode Compatibility The search results indicate that the "Coherent T251P-2C" is a model number associated with a laser chiller system, specifically the ThermoTek T251P-2 Solid

State Temperature Regulation Control Laser Chiller. This suggests that the T251P-2C is not a laser diode itself, but rather a component or a specific configuration of a chiller system designed to work with lasers. The ThermoTek T251P-2 chiller can regulate temperature for laser systems. It is compatible with various laser applications that require precise thermal management. The chiller utilizes a solid-state temperature regulation control system. Recommended coolants for the ThermoTek T251P-2 chiller include: Distilled water (for operation between 5°C and 45°C) A mixture of 95% distilled water and 5% alcohol (for bacterial growth prevention) A mixture of 80% distilled water and 20% corrosion-inhibited glycol (for temperatures below 5°C), such as Dow Frost Prestone® 5/150 or Prestone® LOTOX Antifreeze. The chiller has an operational temperature range specified by the coolant used. For example, using distilled water limits operation to between 5°C and 45°C. The system works with laser applications and requires proper ventilation. It should be plugged into a properly grounded power source and not operated without fluid in the reservoir. The unit must not be operated in a sealed environment. Electrical * Operating voltage: Within 10% of the rated voltage Physical * Dimensions: Not specified in the provided search results. Weight: Not specified in the provided search results. Mounting: Not specified in the provided search results. Interfaces * Control Interface: Buttons for adjusting set temperature (Up and Down), Run/Standby mode selection. Display: LCD display for Life Timer, alarms, coolant temperature, and set temperature. Operational Parameters * Cooling Capacity: Capable of managing a heat load up to 200 Watts. Exceeding this capacity may trigger a high-temperature alarm. Ambient Temperature Operation: Recommended to operate within a range where the ambient temperature does not exceed 40°C to prevent overheating. Fluid Level Monitoring: Equipped with a low coolant level alarm that requires immediate action by adding coolant. Temperature Alarms: Features high and low temperature alarms, as well as a temperature sensor failure alarm. Fan Operation: Fans cycle on and off to manage temperature. Maintenance and Operation * Fluid Replacement: Recommended coolant replacement intervals vary based on the type of fluid used, ranging from monthly for distilled water to every 90 days for glycol mixtures. Cleaning: Exterior cleaning can be done with a soft cloth and warm soapy water. Abrasive or solvent-based cleaners should be avoided. Air Filter: The air filter can be removed, washed with warm soapy water, and dried before re-installation. Why Choose Aumictech for Coherent T251P-2C? At Aumictech, we specialize in supplying high-end laser system support equipment. Whether you need reliable thermal management for your critical laser processes, efficient cooling solutions to ensure optimal laser performance, or solid system integration for your laboratory or industrial setup, our team ensures the Coherent T251P-2C delivers maximum performance for your application.

T251P2C Characteristics / Specifications

PARAMETER	VALUE
Model	T251P-2C
Instrument Type	laser power sensor
Manufacturer	Coherent
Literature	Coherent T251P-2C laser power sensor listing; Coherent air-cooled thermopile family datasheet as family context
Family	Coherent thermopile power sensors
Form Factor	thermopile sensor head
System Role	laser power sensor
Brand Lineage	Coherent
Queue Title	Coherent T251P-2C Laser Power Sensor
Documentation Type	OEM T251P-2C listing
Use Case	Laser average-power measurement with a Coherent thermopile head that specifies T251P-2C
Vendor Path	Coherent
Year Class	T251P-2C generation
Application Class	laser power sensor
Module Class	laser power sensor
Host Class	instrument host per drawing
Connector Class	connectors on the T251P-2C drawing
Ate Class	laser power metrology
Control Class	T251P-2C front panel / firmware
Environment Class	ambient on the T251P-2C sheet
Mains Class	mains on the T251P-2C nameplate
Voltage Class	volts on the T251P-2C nameplate
Current Class	amperes on the T251P-2C nameplate
Family Band Power	Coherent air-cooled thermopile family datasheet 10 mW to 150 W (family, not assigned as this SKU range)

PARAMETER	VALUE
Family Spectral	Coherent air-cooled family 0.15 um to 11 um (family, not assigned as this SKU coating)
Family Aperture	Coherent air-cooled family 19 mm and 50 mm active areas (family examples)
Aperture Class	aperture on the T251P-2C label
Cal Wavelength	calibration wavelength on the T251P-2C label
Cable Class	cable/interface on the T251P-2C drawing

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.

Specifications	
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Notes
From remaining-queue title (Coherent T251P-2C laser power sensor) and Coherent air-cooled thermopile family context (10 mW to 150 W, 0.15-11 um) not copied as this SKU's range. T251P-2C label wins.

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
sales@aumictech.com · +1 (484) 841-9341
<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.