

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

ILX LIGHTWAVE

ILX Lightwave LDT-5910 Temperature Controller

Key Features - Actual, Set, and Auto display modes with set-temperature lock - User current-limit control for TE cooler protection - Optional 1227 GPIB interface (not installed on all units) - Optional 5310 output power booster - X-series enclosure rack-mount and interlocking kits (302, half-width filler, 112) - Tilt feet for bench viewing Technical Specifications Model: LDT-5910 Manufacturer: ILX Lightwave (Newport / MKS) Instrument Type: Thermoelectric temperature controller Alias: LDT5910 Output type: bipolar constant current source Compliance 1 A: 8 V Compliance 2 A: 7 V Compliance 3 A: 6 V Maximum current output: 4.6 A Maximum output power: 15 W typical Temperature range typical 10 kohm: -50 C to greater than 100 C Setpoint resolution at 0 C: ± 0.1 C Setpoint accuracy at 0 C: ± 0.2 C Setpoint resolution at 20 C: ± 0 .



MODEL

**ILX Lightwave
LDT5910**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

LDT5910

LISTING

<https://aumictechlabs.com/products/ldt5910-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The ILX Lightwave LDT-5910 is a precision laser diode driver designed for demanding laser control applications. It delivers low-noise, highly stable current to laser diodes, ensuring accurate and reliable optical output. Ideal for research and development, scientific, and industrial laser systems.

Features & description

From manufacturer datasheet

Features

- Actual, Set, and Auto display modes with set-temperature lock
- User current-limit control for TE cooler protection
- Optional 1227 GPIB interface (not installed on all units)
- Optional 5310 output power booster
- X-series enclosure rack-mount and interlocking kits (302, half-width filler, 112)
- Tilt feet for bench viewing

LDT5910 Characteristics / Specifications

PARAMETER	VALUE
Model	LDT-5910
Manufacturer	ILX Lightwave (Newport / MKS)
Instrument Type	Thermoelectric temperature controller
Alias	LDT5910
Output type	bipolar constant current source
Compliance 1 A	8 V
Compliance 2 A	7 V
Compliance 3 A	6 V
Maximum current output	4.6 A
Maximum output power	15 W typical
Temperature range typical 10 kohm	-50 C to greater than 100 C
Setpoint resolution at 0 C	±0.1 C
Setpoint accuracy at 0 C	±0.2 C
Setpoint resolution at 20 C	±0.1 C
Setpoint accuracy at 20 C	±0.2 C
Setpoint resolution at 50 C	±0.2 C
Setpoint accuracy at 50 C	±0.2 C
Short term stability	0.01 C or better
Sensor type	2-wire thermistor
Usable resistance range	0 to 450 kohm typical
Sensing current	10 uA or 100 uA user selectable
Calibration	Steinhart-Hart three constants in non-volatile memory
Display type	4 digit green LED
Maximum current reading	9999 mA
Maximum temperature reading	999.9 C

PARAMETER	VALUE
Display resolution current	±1.0 mA
Display resolution temperature	±0.1 C
AC power	105-125 or 210-250 VAC jumper selectable, 50-60 Hz
Size	88 mm x 212 mm x 269 mm (3.5 in x 8.4 in x 10.6 in)
Operating temperature	0 to 50 C
Storage temperature	-40 to 70 C
Warmup	1 hour to rated accuracy
Rack mount flange kit	Model 302
Accuracy condition	typical 10 kohm thermistor and 100 uA source; relative to calibration standard

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	40 to 70 C
Operating temperature	0 to 50 C
Operating Temperature	0 to 50 C
Warmup	1 hour to rated accuracy
Rack mount flange kit	Model 302
Accuracy condition	typical 10 kohm thermistor and 100 uA source; relative to calibration standard Notes Specs from ILX Lightwave LDT-5910 instruction manual section 1.3. Confirm whether Model 1227 GPIB is installed. LDT-5910C isalater 32 W USB/GPIB instrument with different current, voltage, and stability ratings.

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 to this original 5910.

Applications

Laser diode temperature control and frequency stabilization; IR detector cooling; device characterization versus temperature; optional GPIB automated loops; booster 5310 for higher output power.

Key Features

- Actual, Set, and Auto display modes with set-temperature lock
- User current-limit control for TE cooler protection
- Optional 1227 GPIB interface (not installed on all units)
- Optional 5310 output power booster
- X-series enclosure rack-mount and interlocking kits (302, half-width filler, 112)
- Tilt feet for bench viewing

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	LDT-5910
Manufacturer	ILX Lightwave (Newport / MKS)
Instrument Type	Thermoelectric temperature controller
Alias	LDT5910
Output type	bipolar constant current source
Compliance 1 A	8 V
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Compliance 3 A	6 V
Maximum current output	4.6 A
Maximum output power	15 W typical
Temperature range typical 10 kohm	-50 C to greater than 100 C
Setpoint resolution at 0 C	±0.1 C
Setpoint accuracy at 0 C	±0.2 C
Setpoint resolution at 20 C	±0.1 C
Setpoint accuracy at 20 C	±0.2 C
Setpoint resolution at 50 C	±0.2 C
Setpoint accuracy at 50 C	±0.2 C
Short term stability	0.01 C or better
Sensor type	2-wire thermistor
Usable resistance range	0 to 450 kohm typical

PARAMETER	VALUE
Sensing current	10 uA or 100 uA user selectable
Calibration	Steinhart-Hart three constants in non-volatile memory
Display type	4 digit green LED
Maximum current reading	9999 mA
Maximum temperature reading	999.9 C
Display resolution current	±1.0 mA
Display resolution temperature	±0.1 C
AC power	105-125 or 210-250 VAC jumper selectable, 50-60 Hz
Size	88 mm x 212 mm x 269 mm (3.5 in x 8.4 in x 10.6 in)
Operating temperature	0 to 50 C
Storage temperature	-40 to 70 C
Warmup	1 hour to rated accuracy

Optional GPIB: Model 1227 IEEE-488

Optional booster: Model 5310

Rack mount flange kit: Model 302

Accuracy condition: typical 10 kohm thermistor and 100 uA source; relative to calibration standard

Notes

Specs from ILX Lightwave LDT-5910 instruction manual section 1.3. Confirm whether Model 1227 GPIB is installed. LDT-5910C is a later 32 W USB/GPIB instrument with different current, voltage, and stability ratings.

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.