

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

ILX LIGHTWAVE

ILX Lightwave LDX-3545: Precision Current Source, 1/3 A, LDX-3500B Series

The ILX Lightwave LDX-3545 is a precision current source designed for laser diode applications. It is part of the LDX-3500B series and provides a current output of up to 1/3 A. This current source is ideal for researchers and engineers needing a reliable and accurate current supply for characterizing and operating laser diodes.



MODEL

**ILX Lightwave
LDX-3545**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

LDX-3545

LISTING

<https://aumictechlabs.com/products/ldx-3545-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The ILX Lightwave LDX-3545 is a precision current source for laser diode characterization and operation. It delivers highly stable, low-noise current output across dual ranges - 1 A and 3 A - with setpoint accuracy of $\pm 0.1\%$ of full scale and 1-hour stability better than 20 ppm FS. The instrument operates in constant current and constant power modes, supporting analog modulation up to 50 kHz and photodiode-based feedback for closed-loop power control. Integrated laser protection includes adjustable current limits, shorting relays, intermittent contact protection, and transient suppression. A five-digit green LED display provides real-time parameter readout, while USB 2.0 connectivity and LabVIEW® drivers enable automated test integration. Technical Specifications Current Output: Dual ranges of 1 A and 3 A Setpoint

Resolution: 250 μ A (1 A range), 750 μ A (3 A range) Setpoint Accuracy: ± 1 mA (1 A range), ± 3 mA (3 A range) Output Current Stability: <20 ppm FS (1-hour), <50 ppm FS (24-hour) Compliance Voltage: 6.5 V (nominal), 6 V at 95 VAC input Temperature Coefficient: <50 ppm FS/ $^{\circ}$ C Output Noise/Ripple: 15 μ A (low bandwidth), 25 μ A (high bandwidth) Photodiode Current Measurement Range: 5–9999 μ A Photodiode Reverse Bias: 0–5 V Key Features Constant current and constant power operating modes Analog modulation: DC to 50 kHz (standard), DC to 500 kHz (constant current high bandwidth) Photodiode current measurement for closed-loop power control Current limit clamping prevents overshoot under any condition Laser protection: adjustable limits, shorting relays, intermittent contact protection, slow turn-on circuits, transient protection Five-digit green LED display - readable with laser safety glasses Remote analog output for system monitoring Typical Applications Laser diode characterization and burn-in testing Precision power and current control in optical systems Closed-loop power regulation via photodiode feedback Compatibility & Integration USB 2.0 interface LabVIEW[®] virtual instrument drivers Current source output: 9-pin D-sub female connector Analog output: BNC connector Operating environment: 10 $^{\circ}$ C to 40 $^{\circ}$ C, <85% RH non-condensing Dimensions: 88 mm H $\times$ 185 mm W $\times$ 304 mm D; Weight: 3.5 kg

Features & description

From manufacturer datasheet

Technical Specifications

Current Output: Dual ranges of 1 A and 3 A Setpoint Resolution: 250 μ A (1 A range), 750 μ A (3 A range)
Setpoint Accuracy: ± 1 mA (1 A range), ± 3 mA (3 A range) Output Current Stability: <20 ppm FS (1-hour), <50 ppm FS (24-hour) Compliance Voltage: 6.5 V (nominal), 6 V at 95 VAC input Temperature Coefficient: <50 ppm FS/ $^{\circ}$ C Output Noise/Ripple: 15 μ A (low bandwidth), 25 μ A (high bandwidth)
Photodiode Current Measurement Range: 5–9999 μ A Photodiode Reverse Bias: 0–5 V

Key Features

Constant current and constant power operating modes Analog modulation: DC to 50 kHz (standard), DC to 500 kHz (constant current high bandwidth) Photodiode current measurement for closed-loop power control Current limit clamping prevents overshoot under any condition Laser protection: adjustable limits, shorting relays, intermittent contact protection, slow turn-on circuits, transient protection Five-digit green LED display - readable with laser safety glasses Remote analog output for system monitoring

Compatibility & Integration

USB 2.0 interface LabVIEW[®] virtual instrument drivers Current source output: 9-pin D-sub female connector Analog output: BNC connector Operating environment: 10 $^{\circ}$ C to 40 $^{\circ}$ C, <85% RH non-condensing Dimensions: 88 mm H $\times$ 185 mm W $\times$ 304 mm D; Weight: 3.5 kg

ILX Lightwave LDX-3545 — Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the ILX Lightwave LDX-3545. 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](#) →

ILX Lightwave LDX-3545 price

This ILX Lightwave LDX-3545 is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

ILX Lightwave LDX-3545 calibration cost

NIST-traceable calibration for the ILX Lightwave LDX-3545 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 characterization and burn-in testing Precision power and current control in optical systems
Closed-loop power regulation via photodiode feedback

Unit notes

The ILX Lightwave LDX-3545 is a precision current source for laser diode characterization and operation. It delivers highly stable, low-noise current output across dual ranges - 1 A and 3 A - with setpoint accuracy of $\pm 0.1\%$ of full scale and 1-hour stability better than 20 ppm FS. The instrument operates in constant current and constant power modes, supporting analog modulation up to 50 kHz and photodiode-based feedback for closed-loop power control. Integrated laser protection includes adjustable current limits, shorting relays, intermittent contact protection, and transient suppression. A five-digit green LED display provides real-time parameter readout, while USB 2.0 connectivity and LabVIEW® drivers enable automated test integration.

Technical Specifications

Current Output: Dual ranges of 1 A and 3 A
Setpoint Resolution: 250 μA (1 A range), 750 μA (3 A range)
Setpoint Accuracy: $\pm 1\text{ mA}$ (1 A range), $\pm 3\text{ mA}$ (3 A range)
Output Current Stability: <20 ppm FS (1-hour), <50 ppm FS (24-hour)
Compliance Voltage: 6.5 V (nominal), 6 V at 95 VAC input
Temperature Coefficient: <50 ppm FS/ $^{\circ}\text{C}$
Output Noise/Ripple: 15 μA (low bandwidth), 25 μA (high bandwidth)
Photodiode Current Measurement Range: 5–9999 μA
Photodiode Reverse Bias: 0–5 V

Key Features

- Constant current and constant power operating modes
- Analog modulation: DC to 50 kHz (standard), DC to 500 kHz (constant current high bandwidth)
- Photodiode current measurement for closed-loop power control
- Current limit clamping prevents overshoot

LDX-3545 Specifications

PARAMETER	VALUE
Voltage / Current Range	0-1 A / 0-3 A, 6.5 V compliance

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.

The ILX Lightwave LDX-3545 is a precision current source designed for laser diode applications. It is part of the LDX-3500B series and provides a current output of up to 1/3 A. This current source is ideal for researchers and engineers needing a reliable and accurate current supply for characterizing and operating laser diodes.

The ILX Lightwave LDX-3545 is a precision current source for laser diode characterization and operation. It delivers highly stable, low-noise current output across dual ranges - 1 A and 3 A - with setpoint accuracy of $\pm 0.1\%$ of full scale and 1-hour stability better than 20 ppm FS. The instrument operates in constant current and constant power modes, supporting analog modulation up to 50 kHz and photodiode-based feedback for closed-loop power control.

Integrated laser protection includes adjustable current limits, shorting relays, intermittent contact protection, and transient suppression. A five-digit green LED display provides real-time parameter readout, while USB 2.0 connectivity and LabVIEW® drivers enable automated test integration.

Aumictech offers NIST-traceable calibration and repair for the ILX Lightwave LDX-3545. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1-3 business days after receipt.

LDX-3545 Specifications

PARAMETER	VALUE
Voltage / Current Range	0-1 A / 0-3 A, 6.5 V compliance

Technical Specifications

Current Output: Dual ranges of 1 A and 3 A Setpoint Resolution: 250 μ A (1 A range), 750 μ A (3 A range)

Setpoint Accuracy: ± 1 mA (1 A range), ± 3 mA (3 A range) Output Current Stability: <20 ppm FS (1-hour), <50 ppm FS (24-hour) Compliance Voltage: 6.5 V (nominal), 6 V at 95 VAC input Temperature Coefficient: <50 ppm FS/°C Output Noise/Ripple: 15 μ A (low bandwidth), 25 μ A (high bandwidth) Photodiode Current Measurement Range: 5-9999 μ A Photodiode Reverse Bias: 0-5 V

Key Features

Constant current and constant power operating modes Analog modulation: DC to 50 kHz (standard), DC to 500 kHz (constant current high bandwidth) Photodiode current measurement for closed-loop power control Current limit clamping prevents overshoot under any condition Laser protection: adjustable limits, shorting relays, intermittent contact protection, slow turn-on circuits, transient protection Five-digit green LED display - readable with laser safety glasses Remote analog output for system monitoring

Compatibility & Integration

USB 2.0 interface LabVIEW® virtual instrument drivers Current source output: 9-pin D-sub female connector Analog output: BNC connector Operating environment: 10°C to 40°C, <85% RH non-condensing Dimensions: 88 mm H $\times$ 185 mm W $\times$ 304 mm D; Weight: 3.5 kg

ILX Lightwave LDX-3545 – Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the ILX Lightwave LDX-3545. 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](#) $\rightarrow$ [Request Repair Quote](#) $\rightarrow$

ILX Lightwave LDX-3545 price

This ILX Lightwave LDX-3545 is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

ILX Lightwave LDX-3545 calibration cost

NIST-traceable calibration for the ILX Lightwave LDX-3545 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 →

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>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 12, 2026

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