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Data Sheet
August 14, 2026

ILX LIGHTWAVE

ILX Lightwave LDC-3762 Laser Diode Controller

Aumictech offers NIST-traceable calibration and repair for the ILX Lightwave LDC3762. Calibration covers I/O channel accuracy per specification, analog output and input calibration to rated accuracy, and functional communication interface test (serial, Ethernet, fieldbus). All calibrations ship with a NIST-traceable certificate. Turnaround is typically 1–3 business days after receipt. Common ILX Lightwave LDC3762 faults: blown I/O fuses, failed analog modules, power supply capacitor failure. Common faults include blown I/O protection fuses, failed analog I/O modules, power supply capacitor failure, and serial or Ethernet communication port damage. This ILX Lightwave LDC3762 is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units. NIST-traceable calibration for the ILX Lightwave LDC3762 is (standard — pass/fai

MODEL **ILX Lightwave LDC3762**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **LDC3762**	LISTING **https://aumictechlabs.com/products/ldc3762-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The ILX Lightwave LDC-3762 is a precision laser diode controller that integrates a low-noise current source and a stable temperature controller. This instrument is ideal for demanding laser diode characterization and control applications where stability and accuracy are paramount. The

LDC-3762 helps maintain consistent laser diode operation, extending its lifespan and ensuring optimal performance in sensitive applications.

LDC3762 Characteristics / Specifications

PARAMETER	VALUE
Laser Current Ranges	10 A / 20 A
Setpoint Accuracy	plus or minus 0.1 percent + 10 mA
Setpoint Resolution	1 mA
Noise and Ripple	less than 5 mA rms
Short Term Stability	plus or minus 50 ppm class
Long Term Stability 24 h Class	less than 100 ppm FS class
Compliance Voltage	4 V
Analog Modulation	yes
TEC Output Power	128 W
TEC Output Current	8 A
TEC Output Voltage	16 V
Temperature Stability Class	plus or minus 0.002 C class selection guide
Temperature Control Range Class	minus 100 C class to high positive range on series
Thermistor Sensor	yes
IC Sensor	yes
RTD Sensor	yes
TEC Control Loop	Digital PID with autotune
Computer Interface	USB and GPIB
Photodiode Measurement Range Class	5 to 10000 uA class
Photodiode Setpoint Accuracy Class	plus or minus 0.05 percent class
Photodiode Reverse Bias	0 to minus 5 V
Laser Protection	Slow start shorting relay adjustable current and voltage limits surge and intermittent contact protection
LIV Capture	Synchronized onboard LIV data collection class
Form Factor	Benchtop high power laser diode controller

LDC3762 Specifications

PARAMETER	VALUE
Applications	High-power single-emitter laser drive to 10 or 20 A, onboard LIV characterization, and TEC-stabilized high-current laser production test.
Key Features	10 A and 20 A current ranges
Technical Specifications	Laser Current Ranges: 10 A / 20 A

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
Numeric rows from MKS/ILX selection guide and LDC-37620 product literature. Queue slug ilx-ldc-3762 maps to

the LDC-37620 high-power controller family; confirm exact faceplate model string.

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

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