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Data Sheet

August 13, 2026

ILX LIGHTWAVE

ILX Lightwave LDC-3916 Modular Laser Controller

The ILX Lightwave LDC-3916 is a precision laser diode controller designed for demanding applications. It offers precise current and temperature control for laser diodes, ensuring stable and reliable operation. Ideal for laboratory and industrial use.



MODEL

**ILX Lightwave
LDC-
3916/LDC3916**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

**LDC-
3916/LDC3916**

LISTING

[https://aumictechlabs.c
om/products/ldc-3916-l
dc3916-2/](https://aumictechlabs.com/products/ldc-3916-l
dc3916-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The ILX Lightwave LDC-3916 Laser Diode Controller is a instrument engineered for precise control of laser diode current and temperature. It has a stable and low-noise environment for laser diodes, crucial for demanding applications in research and development, telecommunications, and materials processing.

Features & description

From manufacturer datasheet

Features

- 16 independent isolated driver-card slots (LDC-3908 is the 8-slot sibling)
- Dual-channel modules for up to 32 laser diodes
- GPIB (HS488 TNT chipset) and RS-232
- Front-panel calibration of all loaded modules; 12-month interval class
- Channel 1 modulation BNC on the rear
- RM-137 / RM-138 rack kits; LabVIEW drivers

LDC3916LDC3916 Characteristics / Specifications

PARAMETER	VALUE
Model	LDC-3916
Manufacturer	ILX Lightwave (Newport / MKS)
Instrument Type	16 channel modular laser diode controller mainframe
Alias	LDC3916; LDC 3916
Module Slots	16
Max Lasers With Dual Modules	32
Size	133 mmHx 482 mmWx 653 mm D (5.25 × 18.98 × 25.7 in)
Weight Mainframe	34.4 kg (76 lb)
Weight With Modules	41 kg (91 lb)
Operating Temperature	0 C to 40 C
Storage Temperature	-40 C to 70 C
Humidity	20 to 85 percent non-condensing
Laser Safety Features	keyswitch, interlock, output delay
Laser Safety Standard	CDRH US21 CFR 1040.10
Chassis Ground	4 mm banana jack
GPIB Connector	24 pin IEEE 488
Factory GPIB Address	1
RS232 Connector	9 pin D-sub
Modulation Connector	BNC
Power Requirements Low	110 to 130 VAC, 60 Hz
Power Requirements High	210 to 240 VAC, 50 to 60 Hz
Display	vacuum fluorescent, 64 × 128 pixels
Display Size	83 mm x 41 mm
Display Brightness Steps	four levels, 12.5 percent per step
Calibration Temperature	23 plus/minus 1.0 C recommended

PARAMETER	VALUE
Calibration Interval	12 months class CE: passed CE requirements, CE mark
Controller Module Current Class	up to 1.5 A with integrated 9 W TEC
Dual LAS Module Current Class	up to 1 A per isolated channel
Dual TEC Module Power Class	two independent 9 W outputs
Related 8 Slot	LDC-3908
Example Controller Module	LDC-3916376 1.5 A / 9 W
Example Dual LAS	LDC-3916334 1 A / 1 A
Example Dual TEC	LDC-3916550 9 W / 9 W
Example High Current LAS	LDC-3916338 3 A
Example High TEC	LDC-3916558 3 A 24 W

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	40 C to 70 C
Operating temperature	0 C to 40 C
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Humidity	20 to 85 percent non-condensing
Laser Safety Features	keyswitch, interlock, output delay
Laser Safety Standard	CDRH US21 CFR 1040.10
Chassis Ground	4 mm banana jack
GPIO Connector	24 pin IEEE 488
Factory GPIO Address	1
RS232 Connector	9 pin D-sub
Modulation Connector	BNC
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Power Requirements High	210 to 240 VAC, 50 to 60 Hz
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Related 8 Slot	LDC-3908
Example Controller Module	LDC-3916376 1.5 A / 9 W
Example Dual LAS	LDC-3916334 1 A / 1 A
Example Dual TEC	LDC-3916550 9 W / 9 W

PARAMETER	VALUE
Example High Current LAS	LDC-3916338 3 A
Example High TEC	LDC-3916558 3 A 24 W Notes Mainframe rows from the ILX LDC-3916 User Manual Table 1.1 General Specifications. Module current/TEC numbers are family maxima from that introduction; detailed accuracy lives on each module file (for example ilx-ldc-3916376.txt). Confirm which cards occupy the 16 slots. This file is the mainframe only, notacurrent-source module.

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	
Specifications	
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Display Size	83 mm x 41 mm
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Calibration Temperature	23 plus/minus 1.0 C recommended
Calibration Interval	12 months class

PARAMETER	VALUE
CE	passed CE requirements, CE mark
Controller Module Current Class	up to 1.5 A with integrated 9 W TEC
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Related 8 Slot	LDC-3908
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Example Dual TEC	LDC-3916550 9 W / 9 W
Example High Current LAS	LDC-3916338 3 A
Example High TEC	LDC-3916558 3 A 24 W

Notes

Mainframe rows from the ILX LDC-3916 User Manual Table 1.1 General Specifications. Module current/TEC numbers are family maxima from that introduction; detailed accuracy lives on each module file (for example ilx-ldc-3916376.txt). Confirm which cards occupy the 16 slots. This file is the mainframe only, not a current-source module.

Laser Safety

Laser safety includes keyswitch, interlock, and output delay. Applications Multi-channel pump control for optical-amplifier test; low-channel-count burn-in; 16-channel DFB source bank with LDM-4616 mount; automated production via GPIB. Key Features - 16 independent isolated driver-card slots (LDC-3908 is the 8-slot sibling) - Dual-channel modules for up to 32 laser diodes - GPIB (HS488 TNT chipset) and RS-2

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

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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.