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Data Sheet

August 13, 2026

ILX LIGHTWAVE

ILX Lightwave LDP-3811 Precision Pulsed Current Source

Manufacturer: ILX Lightwave (Newport / MKS) Instrument Type: Pulsed and CW laser diode current source Alias: LDP3811; LDP-3811-120V / 240V / 220V / 100V Pulse current range: 0 to 200 mA / 0 to 500 mA, floating Instrument Type: Pulsed and CW laser diode current source Alias: LDP3811; LDP-3811-120V / 240V / 220V / 100V Pulse current range: 0 to 200 mA / 0 to 500 mA, floating Pulse amplitude accuracy: $\pm 0.5\%$ of FS (after 2 μ s settling)



MODEL

**ILX Lightwave
LDP-3811**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

LDP-3811

LISTING

<https://aumictechlabs.com/products/ldp-3811-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The ILX Lightwave LDP-3811 is a laser diode driver providing precise current and temperature control for laser diodes. It features adjustable current limits, multiple laser protection interlocks, and a user-friendly interface. This instrument is suitable for researchers and engineers working with laser diodes in various applications.

Features & description

From manufacturer datasheet

Features

- Dual range 200 mA and 500 mA in both CW and pulsed modes
- Constant duty-cycle or constant PRI pulse modes
- Trigger in and trigger out (TTL) without a command program
- Floating output (grounding the LD cathode degrades pulse performance)
- Interlock and key switch laser safety
- IEEE 488 / GPIB standard

LDP3811 Characteristics / Specifications

PARAMETER	VALUE
Model	LDP-3811
Manufacturer	ILX Lightwave (Newport / MKS)
Instrument Type	Pulsed and CW laser diode current source
Alias	LDP3811; LDP-3811-120V / 240V / 220V / 100V
Pulse current range	0 to 200 mA / 0 to 500 mA, floating
Pulse front panel resolution	100 uA
Pulse GPIB resolution	10 uA
Pulse amplitude accuracy	±0.5% of FS (after 2 us settling)
Pulse temperature coefficient	less than 100 ppm perCPulse compliance: greater than 25 V
Overshoot 50 mA to I _{max}	less than ±5%
Overshoot below 50 mA	less than ±2 mA
Maximum load	50 ohm
CW current range	0 to 200 mA / 0 to 500 mA, floating
CW front panel resolution	100 uA
CW GPIB resolution	10 uA
CW accuracy	±0.5% of FS
CW temperature coefficient	less than 100 ppm perCCW short term drift: less than 100 ppm (10 min, half scale)
CW long term drift	less than 200 ppm (24 h, half scale)
CW compliance	greater than 25 V
CW noise ripple	less than 200 uA rms
Pulse width range	0.1 us to greater than 1000 us
Pulse width resolution	100 ns
Pulse width accuracy	10 ns ±0.01% of reading
Pulse rise fall	less than 25 ns (10% to 90%, half scale)
PRI range	1 us to greater than 1000 us

PARAMETER	VALUE
PRI resolution	100 ns
PRI accuracy	20 ns ±0.01% of reading
Duty cycle	0.01% to 100%
Trigger output	TTL; jitter 5 ns; delay 40 ns ±10 ns
Trigger input	TTL; jitter 100 ns; delay 200 ns ±20 ns
Display type	4-digit green LED
Display maxima	505.0 mA, 1000 us, 6.500 ms, 100.0%
Display resolution	0.1 mA, 0.1 us, 0.01%
Display accuracy	±0.5% of FS
Remote interface	GPIB IEEE 488
Weight	5.2 kg (11.4 lb)
Size	88 mm x 212 mm x 269 mm (3.5 × 8.4 × 10.6 in)
AC power	90–105 / 105–125 / 210–230 / 220–250 V, 50–60 Hz
Operating temperature	0 C to 50 C
Storage temperature	–40 C to 70 C
Warm up	1 hour
Laser safety	interlock, key switch
Spec condition	1 hour warm-up at 25 C with 50 ohm load

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	−40 C to 70 C
Operating temperature	0 C to 50 C
Operating Temperature	0 C to 50 C
Warm up	1 hour
Laser safety	interlock, key switch
Spec condition	1 hour warm-up at 25 C with 50 ohm load Notes Specs from ILX Lightwave LDP-3811 brochure (Rev.08 081413). Related pulsed drivers: LDP-3830 (5 A, shorter pulses) and LDP-3840/LDP-3840B (3 A, 10% max duty). Confirm AC voltage suffix.

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.

performance)
- Interlock and key switch laser safety
- IEEE 488 / GPIB standard

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	LDP-3811
Manufacturer	ILX Lightwave (Newport / MKS)
Instrument Type	Pulsed and CW laser diode current source
Alias	LDP3811; LDP-3811-120V / 240V / 220V / 100V
Pulse current range	0 to 200 mA / 0 to 500 mA, floating
Pulse front panel resolution	100 uA
Pulse GPIB resolution	10 uA
Pulse amplitude accuracy	±0.5% of FS (after 2 us settling)
Pulse temperature coefficient	less than 100 ppm perCPulse compliance: greater than 25 V
Overshoot 50 mA to Imax	less than ±5%
Overshoot below 50 mA	less than ±2 mA
Maximum load	50 ohm
CW current range	0 to 200 mA / 0 to 500 mA, floating
CW front panel resolution	100 uA
CW GPIB resolution	10 uA
CW accuracy	±0.5% of FS
CW temperature coefficient	less than 100 ppm perCCW short term drift: less than 100 ppm (10 min, half scale)
CW long term drift	less than 200 ppm (24 h, half scale)
CW compliance	greater than 25 V
CW noise ripple	less than 200 uA rms
Pulse width range	0.1 us to greater than 1000 us
Pulse width resolution	100 ns
Pulse width accuracy	10 ns ±0.01% of reading
Pulse rise fall	less than 25 ns (10% to 90%, half scale)

PARAMETER	VALUE
PRI range	1 us to greater than 1000 us
PRI resolution	100 ns
PRI accuracy	20 ns $\pm$ 0.01% of reading
Duty cycle	0.01% to 100%
Trigger output	TTL; jitter 5 ns; delay 40 ns $\pm$ 10 ns
Trigger input	TTL; jitter 100 ns; delay 200 ns $\pm$ 20 ns
Display type	4-digit green LED
Display maxima	505.0 mA, 1000 us, 6.500 ms, 100.0%
Display resolution	0.1 mA, 0.1 us, 0.01%
Display accuracy	$\pm$ 0.5% of FS
Remote interface	GPIB IEEE 488
Weight	5.2 kg (11.4 lb)
Size	88 mm x 212 mm x 269 mm (3.5 x 8.4 x 10.6 in)
AC power	90-105 / 105-125 / 210-230 / 220-250 V, 50-60 Hz
Operating temperature	0 C to 50 C
Storage temperature	-40 C to 70 C
Warm up	1 hour
Laser safety	interlock, key switch
Spec condition	1 hour warm-up at 25 C with 50 ohm load

Notes
Specs from ILX Lightwave LDP-3811 brochure (Rev.08 081413). Related pulsed drivers: LDP-3830 (5 A, shorter pulses) and LDP-3840/LDP-3840B (3 A, 10% max duty). Confirm AC voltage suffix.

Laser Safety

laser safety - IEEE 488 / GPIB standard Technical Specifications Model: LDP-3811 Manufacturer: ILX Lightwave (Newport / MKS) Instrument Type: Pulsed and CW laser diode current source Alias: LDP3811; LDP-3811-120V / 240V / 220V / 100V Pulse current range: 0 to 200 mA / 0 to 500 mA, floating Pulse front panel resolution: 100 uA Pulse GPIB resolution: 10 uA Pulse amplitude accuracy: $\pm 0.5\%$ of FS (after 2 us sett

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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.