ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Newport / ILX Lightwave LDP-3811* at our website: *Click HERE*

LDP 3811

Precision Pulsed Current Source

Product Features

Stable DC and precision-pulsed current, allowing operation in either CW or pulsed mode

Simplifies remote measurement tasks with standard Trigger In and Out functions

Easily adjustable settings include pulse amplitude, pulse widths from 100 ns to 1 ms, and repetition intervals from 1 µs to > 1ms

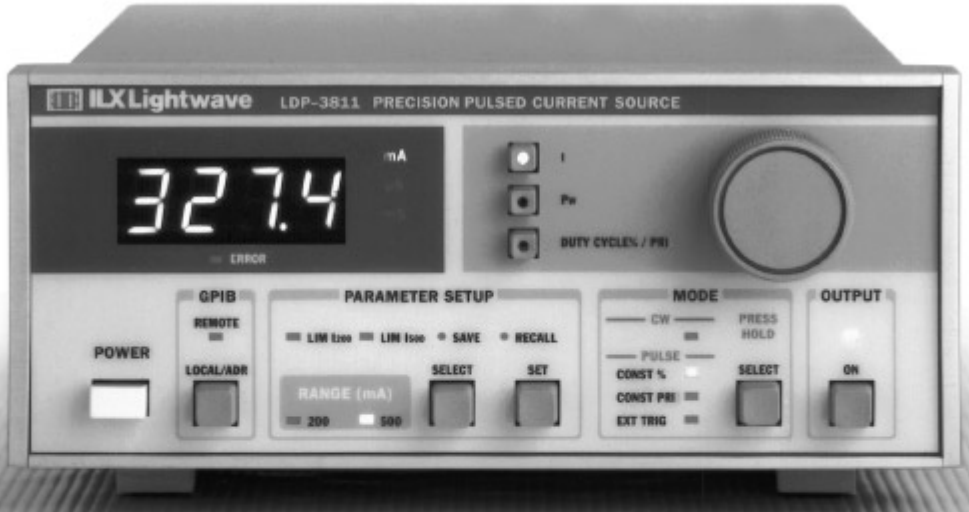
Delivers a clean precise pulse with less than 5% overshoot-guaranteed

Low noise output drives 50 W

Built-in protection features

Specifically designed to drive low power laser diodes, the LDP-3811 is a microprocessor-controlled current source with two operational modes, stable CW or precision pulsed. Offering a dual range 200/500 mA output, it has the flexibility to meet a variety of testing needs. The standard GPIB interface and flexible triggering offer complete system integration with other lab equipment, and improve the ease and speed of data gathering and remote measurement. The intuitive front panel allows you to make adjustments without referring to complicated instructions.

Like everything in ILX Lightwave's comprehensive line of laser diode instrumentation, the LDP-3811 offers complete laser diode protection with features such as current limiting, overshoot minimization, and transient protection.



Precision Pulsed Control of Low Power Laser Diode

ILX Lightwave
Photonic Test & Measurement Instrumentation

LDP 3811

Precision Pulsed Current Source

Complete System Integration

The standard GPIB interface allows remote programming and readout from most computers. All instrument functions are accessible from both the front panel and through the interface bus, making data gathering both quicker and easier. By eliminating rote data gathering, you can be assured of complete data accuracy.

Simplified Measurement

With Remote Triggering, a standard Trigger In and Trigger Out function is located on the rear panel of the LDP-3811. This enables you to trigger measurements from remote instruments, simplify data collection, and certify accurate start and end points for pulse analysis.

CW or Pulsed Mode Operation

Providing stable DC or precision pulsed mode, the LDP-3811 operates as a dual range (200/500mA) and dual mode current source for low power laser diodes. Features like current limits and transient suppression protect the laser diode.

Easy Pulse Adjustments

The LDP-3811 offers a large range of pulse adjustments, with widths from .1 µs to 1 ms, and pulse repetition interval (PRI) from 1 µs to >1 ms. A constant PRI mode allows you to adjust pulse width while maintaining pulse repetition interval. Constant duty cycle mode maintains the preset duty cycle, regardless of PRI or pulse width adjustment. The intuitive front panel offers illuminated operating modes and fault indicators that warn you if your laser diode is at risk.

Less Than 5% Overshoot

The LDP-3811 delivers an exceptionally clean pulse guaranteed to less than 5% overshoot. Its low noise, transient suppressed output is designed to drive 50 W.

Specifications

PULSE AMPLITUDE

Range:	0–200/0–500 mA, floating[1]
Resolution:	10 µA
Accuracy:[2]	± 0.5% of FS
Temperature Coeffecient:	<100 ppm/°C
Compliance Voltage:	≥25 V
Overshoot	
50 mA ≤ I < I_{max}:	< ±5%
<50 mA:	< ±2 mA

CW CURRENT OUTPUT

Range:	0–200/0–500 mA, floating
Resolution:	10 µA
Accuracy:	±0.5% of FS
Temperature Coefficient:	<100 ppm/°C
Short-Term Drift:[3]	<100 ppm
Long-Term Drift:[4]	<200 ppm
Compliance Voltage:	≥25 V
Noise and Ripple:	<200 µA rms

PULSE WIDTH

Range:	0.1 to >1000 µs
Resolution:	100 ns
Accuracy:	10 ns ± 0.01% of reading
Pulse Rise/Fall Time:[5]	<25 ns

PULSE REPETITION INTERVAL (PRI)

Range:	1 to >1000 µs
Resolution:	100 ns
Accuracy:	20 ns ± 0.01% of reading

TRIGGER OUTPUT

Type:	TTL
Jitter:	5 ns
Delay:	40 ns, ±10 ns

TRIGGER INPUT

Type:	TTL
Jitter:	100 ns
Delay:	200 ns, ±20 ns

DISPLAY

Type:	4-digit, green LED
Maximum Readings:	505.0 mA, 1000 µs, 6.500 ms, 100.0%
Resolution:	0.1 mA, 0.1 µs, 0.01%
Accuracy:	±0.5% of FS

GENERAL

Weight:	5.2 kg (11.4 lbs)
Size (HxWxD):	88 mm x 212 mm x 269 mm 3.5" x 8.4" x 10.6"
Power (50–60 Hz):	90–105/105–125/210–230/220–250
Operating Temperature:	0°C–50°C
Storage Temperature:	–40°C to 70°C
Warm up:	1 hour
Laser Safety:	Interlock, key switch

NOTES

All specifications measured after a one-hour warm up at 25°C with a 50 Ω load.

1 Grounding the laser diode cathode degrades pulse performance.
2 Measured after 2 µs settling time.
3 Over any 10 minute interval, half scale output.
4 Over a 24 hour period, half scale output.
5 Measured from 10%–90% points at half scale output.

In keeping with our commitment to continuous improvement, ILX Lightwave reserves the right to change specifications without notice and without liability for such changes.

ORDERING INFORMATION

LDP-3811	Precision Pulsed Current Source
CC-305S	Current Source/Laser Diode Mount Interconnect Cable
CC-306S	Current Source/Unterminated Interconnect Cable
LNF-320	Low Noise Filter
RM-122	Dual Rack Mounting Kit
RM-124	Single Rack Mounting Kit

LabVIEW® 3.0 instrument driver

ILX Lightwave
Photonic Test & Measurement Instrumentation
P.O. Box 6310, Bozeman, MT 59771 • FAX: 406-586-9405

www.ilxlightwave.com

For information call
1-800-459-9459
International Inquiries: 406-586-1244
email: sales@ilxlightwave.com

Rev. 6/5/01

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP