arroyo instruments

Laser Diode Drivers

4200-DR & 4300 SERIES LASERSOURCE LASER DIODE DRIVERS

The Arroyo Instruments **LaserSource** represents the culmination of 23 years of experience developing current sources for laser diode test and measurement. By incorporating industry standard features with important improvements in instrument design, the **LaserSource** series of products are the most advanced laser diode drivers in the market today.

Quick Specifications

Primary Specifications	4201 -DR	4205 -DR	4220 -DR	4302	4304	4308	4320
Current Range (mA) *Low Range* / *High Range*	50 / 100	250 / 500	1,000 / 2,000	2,000	4,000	8,000	20,000
Photodiode Input Range (mA)	5	5	5	20	20	20	20
Compliance Voltage (V)	10	10	5	15	8	5	5
QCW Parameters							
Minimum Pulse Width (µs)				100	100	100	100
Rise Time (µs)				< 20	< 20	< 20	< 40
Duty Cycle (%)				0.1–60	0.1–60	0.1–60	0.1–60
General Specifications							
Size (H x W x D) [in (mm)]	1.82 (47) x 8.5 (215) x 11 (280)			3.5 (90) x 8.5 (215) x 12 (305)			
Output Connector	DB-9			DB-9			9W4
Computer Interfaces	USB			USB & RS-232			

Ordering Information:

XSoptix

800 Village Walk #316
Guilford, CT 06437
Ph: 203-401-8093

Email orders to: sales@xsoptix.com
Fax orders to: 800-878-7282

At a Glance

Dual Range (4200-DR)
Low Noise
100mA to 20 Amps
Computer Interface
QCW Options

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Dual Range & 4-Wire Sense on the New 4200-DR

The new **4200-DR** drivers feature a dual range operation, giving you the flexibility to drive high current devices, while also having a low current, higher precision, lower noise mode, further expanding on the flexibility of our low current drivers. In addition to dual range, the **4200-DR** adds four-wire voltage sense for more accurate device voltage measurements.

Full Isolation Means No Ground Loops

Ground loops can plague instrument setups. In a major design improvement over traditional laser drivers, *every* input & output are optically and electrically isolated from each other, creating a versatile instrument that is unaffected by the electrical configuration of your diode or other test equipment. Even the photodiode input is fully isolated from the laser output, ensuring full isolation of the laser output from unwanted ground loops and other electrical disturbances. No other driver on the market has this capability.

Computer Interfaces

All **LaserSources** come standard with a USB interface, and **4300 LaserSources** also include RS-232. They are command set compatible with other manufacturers' drivers, allowing you to leverage any existing software you may have already developed.

Quasi-CW (QCW) Capable

The **4300 Series LaserSource** can be optionally equipped for quasi-CW (QCW) measurements, and feature both a trigger in and trigger out BNC for synchronization with other instruments. Pulses can be generated using the internal function generator, or triggered externally. Adding QCW mode does not mean you lose CW operation: QCW-equipped instruments retain all the capabilities of their CW-only cousins.

Analog Modulation

All **LaserSources** support analog modulation, and hardware protection is active during modulation, protecting the laser diode regardless of the modulation input signal.

Powerful User Interface

Unlike other instruments, the **LaserSource** employs a dot-pixel character display that allows for human-readable status, readings, and errors. No longer do you need to get out the manual to figure out how to set the current limit, or to understand what error 114 is; you can read it directly on the display in plain English.

Need More Current or Voltage? Call Us...

While we offer several standard current ranges, many applications require higher voltages or higher currents. Call us to discuss your high voltage or high current application, and we'll see if we have a solution for you.

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