Why Choose ILX Lightwave?

Experience.
For thirty years, ILX Lightwave has been a pioneer in laser diode instrumentation and test systems, starting with the industry’s first precision laser diode current source in 1986. Since then, we have continued to grow and evolve with the expanding photonic industry, building a tradition of innovation, quality, and customer service.

Quality.
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Commitment.
ILX Lightwave’s mission is to be the world leader in laser diode instrumentation and test systems. ILX Lightwave has been developing high performance reliability and burn-in test systems for over 15 years and continues to invest senior engineering resources to develop new systems.

After Sales Support.
ILX understands the need for fast, technically accurate responses to all support requests. In addition to customer service engineers, our test system customers have direct access to ILX Lightwave application and design engineers to ensure the highest level of technical support.

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

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Proven Protection.
- Pioneer in laser diode protection
- Drives down laser damaging transient
- Suppresses electrostatic discharges
- Trusted reliability and proven results

Over thirty years ago, ILX Lightwave introduced the world’s first precision laser diode current source. ILX continues to develop and deliver laser diode protection features that are the standard for laser diode control.

HIGH POWER LASER DIODE RELIABILITY AND BURN-IN SYSTEM
LRS-9550
RELIABILITY AND BURN-IN

Reliability Testing
- Stable laser diode control
- Accurate measurement over thousands of hours
- Constant current or constant power modes
- Custom auxiliary measurement and control

ReliaTest Software
- Real time burn-in and LIV test data
- CSV formatted data access while tests are running
- Advanced graphing capabilities
- Run sequential burn-in and LIV test steps

Individual Fixture Temperature Control
- Temperature range of 25°C to 85°C
- Long term stability
- Uniform temperature control
- Custom temperature ranges

Flexibility
- Run up to 44 separate test sequences
- Up to 512 channels
- 1 - 8 shelves
- Custom fixture designs

Designed to Protect Your Laser
- Programmable current ramp on and off to reduce thermal shock
- Over current protection
- Over and under temperature protection
- Controlled shutdown on power failure

Custom Design the System to Your Needs

LRS-9550 SPECIFICATIONS

System Capacity | Up to 512 devices
Device Types Supported | C-Block, COC, Custom Customer Packages
Devices per Fixture | Up to 16

TEMPERATURE CONTROL
- Temperature Range: 25°C - 85°C
- Temperature Control: Per shelf
- Temperature Accuracy: ±2.0°C
- Temperature Stability: ±0.3°C

LASER CONTROL
- Output Polarity: Bipolar, user selectable
- Laser Drive Current
  - Range: 500 mA to 20 A
  - Setpoint Accuracy: ±50 mA
  - Stability: ±10 mA
- Compliance Voltage: 2.5V typical; high voltages available upon request

Control Modes
- ACC, LIV

Operational Transients
- <1 A
- Burst / Surge Transients: <200 mA

MEASUREMENT FUNCTIONS
- Laser Voltage Range: 0 - +3.0V
- Laser Voltage Accuracy: ±50 mV
- Internal Monitor Photodiode
  - Reverse Bias Range: 0 - 8V
  - Measurement Range: 0 - 20W
  - Accuracy: ±2 mA

EXTERNAL PHOTODIODE
- Optical Power Measurement Range: Up to 20W
- Optical Power Measurement Accuracy: ±20% of full scale
- Optical Power Measurement Resolution: 5 mW
- Optical Power Measurement Stability: ±1% of full scale
- Wavelength Range: 400 - 1600 nm
- Detector Type: Si or InGaAs

SYSTEM CONTROL COMPUTER AND SUPERVISORY SOFTWARE
- Computer Type: Laptop
- Minimum Specifications: 2 GHz Dual Core CPU, 8 GB RAM, 100GB HDD
- Battery Operation: >30 minutes
- Power Requirements: 115/230 VAC, 50/60 Hz, single phase, 10A
- Operating System: Microsoft Windows 7 or newer
- System Control Software: ReliaTest™

GENERAL
- Size and Weight: 80 cm x 80cm x 190 cm; 500 kg
- Power Requirements: 200 - 240 VAC, 50/60 Hz, three phase, 70A

NOTES: Temperature control range depends on total power dissipated on the fixture. 1) Higher currents can be achieved by summing current sources on custom fixtures. 2) Stability measured over 1000 hours.
RELIABILITY AND BURN-IN

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