

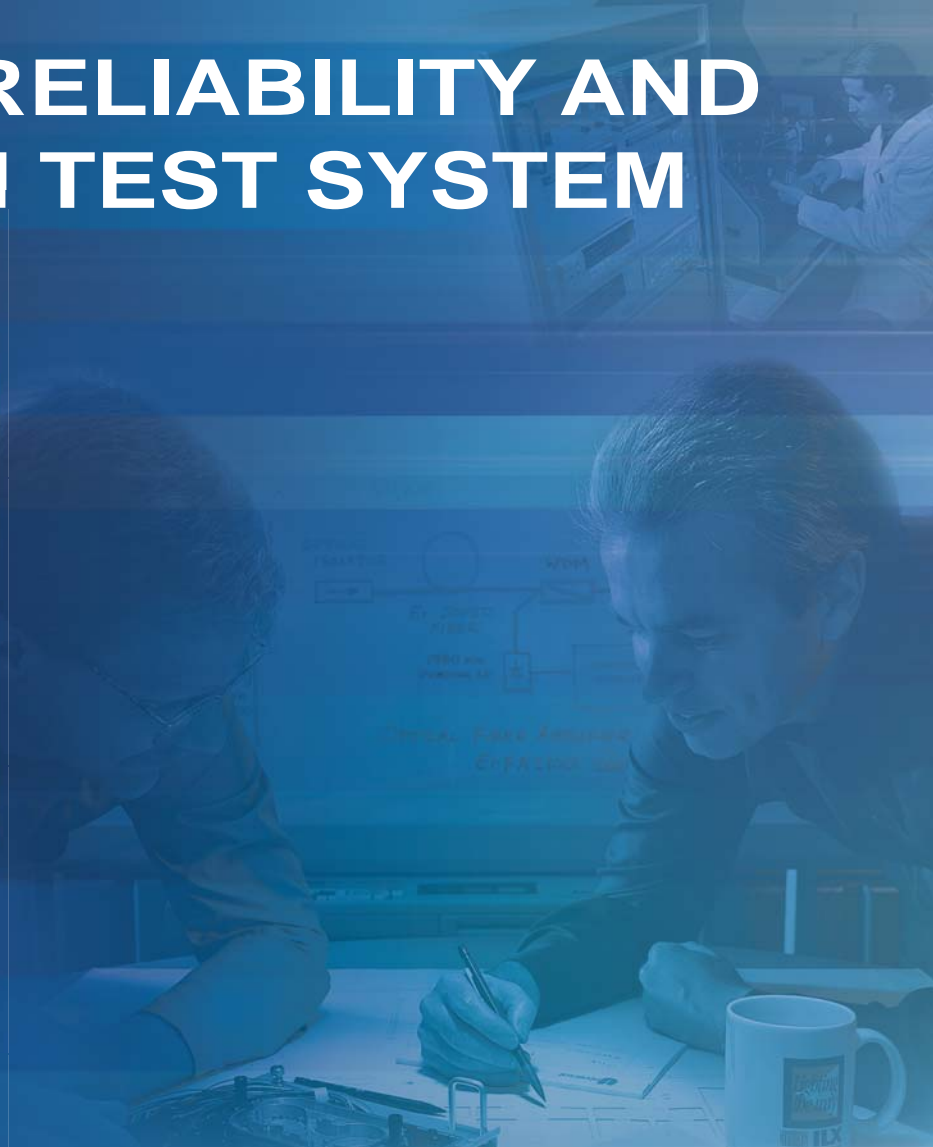
reliable

affordable

flexible

LRS-9424B

LASER RELIABILITY AND BURN-IN TEST SYSTEM



LRS-9424B

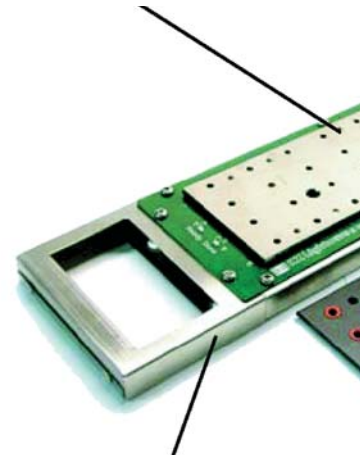
Laser Reliability and Burn-In Test System

ILX Lightwave's LRS-9424B Laser Reliability and Burn-In Test System is the right choice for precision and flexibility at an affordable price. With up to 1024 devices in the 9424B's compact chamber, you'll be able to increase throughput and lower your overall cost of test. The modular design of the 9424B allows for low initial purchase price and gives opportunity for future expansion as your business grows.

Our proven laser control technology gives you the flexibility to process TO-can lasers, TOSA assemblies, and proprietary package styles in the same system. The 9424B supports APC, ACC, and LIV test modes and the powerful ReliaTest™ system control software allows customers to automate their tests by easily creating multiple test steps. In addition careful attention to data management and fault mode handling ensures data integrity even through power black outs.



Nickel plated aluminum heat sink
with distributed heating element



Pin guard

TO-Can

**Combine reliability, burn-in,
engineering evaluation in
effective platform with the**

Applications

Laser Diode

Independent fixture temperature control allows multiple tests to be configured in each system

The LRS-9424B is a sophisticated reliability and burn-in test system with precision in-situ monitoring and test capability making it well suited for engineering evaluation, life testing, and production burn-in screening of laser diodes and LEDs. The 9424B's long-term stability and reliability make it ideal for Telcordia qualification testing of laser diodes intended for telecommunication applications. The system's modular design allows it to be readily adapted to meet a wide range of package styles and test criteria for low power devices.

The 9424B offers high density with the capability of accommodating up to 32 fixtures and 1024 devices in each system. At the same time, the 9424B's unique thermal management system allows each fixture to be independently temperature controlled with an accuracy of $\pm 1.0^{\circ}\text{C}$. With this approach it is possible to run up to 32 independent test processes simultaneously.

Each test can be quickly configured using the ReliaTest™ system software and test scenarios can include multiple phases of ACC or APC mode burn-in combined with LIV tests. APC mode can be configured using either the internal photodiode or optional external photodiode array.

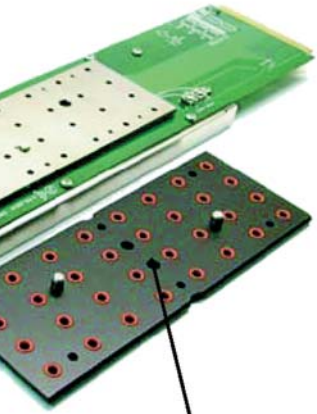
High system stability insures accurate

Based on proven ILX Light technology, the LRS-9424B provides constant current (ACC) and 0.1% over 1000 hours con

Multiple levels of laser diode circuitry, normally closed startup and power shutdown protection for your laser diode for data backup to maintain the computer is disconnected. ReliaTest™ system software AC power and loss of com

A temperature controlled applications requiring extreme high system stability each controlled at approximately This provides guaranteed of full scale.

sink
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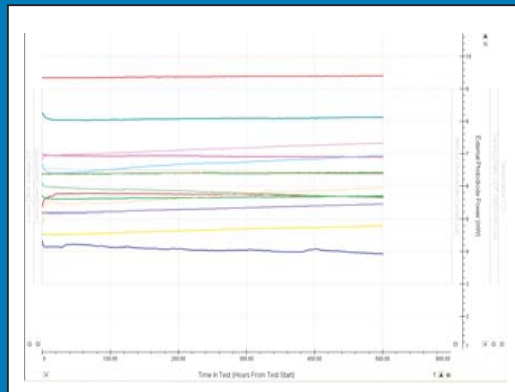


Clamping plate

n Fixture

Save, view, and graph data w

-in, and
nto one cost
e LRS-9424B



Long Term Aging Trend



Why Choose ILX Lightwave?

Experience.

For twenty five 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.

ILX Lightwave has maintained ISO 9000 certification since 2001. Strong internal systems for problem identification and resolution have resulted in continuous improvement of our products and services. We believe that quality is not just something you build into a product; it's something you build into everything you do.

Commitment.

ILX Lightwave's mission is to be the world leader in laser diode instrumentation and test systems. The company's Laser Diode Test Systems group is led by the President to ensure high focus.

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.

LRS-9424B Specifications

System

System Capacity	1024 devices
Device Types Supported	TO-Can, TOSA, Custom
Devices per Fixture	Up to 32

Temperature Control

Temperature Range	°C	40 - 150
With 25°C Option	°C	25 - 100
Multiple Temp Control		Yes
Temperature Accuracy		
25°C to 100°C	°C	±1.0
100°C to 150°C	°C	±2.0
Maximum ΔT		
Between Fixtures	°C	60

Laser Control

Output Polarity		Bipolar, User Selectable	
Drive Current			
Range	mA	200	400
Setpoint Accuracy	mA	±0.1	±0.1
Stability ¹	% of FS	±0.1	±0.1
Compliance Voltage	V	3.0V Typical, 2.8V minimum	
Control Modes		ACC, APC, LIV	

Measurement Functions

Laser Voltage		
Range	V	0 - 5
Accuracy	V	±0.01
Internal Monitor Photodiode		
Reverse Bias Range	V	0 - 8
Measurement Range	μA	0 - 2000
Accuracy	μA	±2
Stability ¹	% of FS	±0.1
Front-Facet Photodetector		
Detector Types		Si, InGaAs
Measurement Range		User-Specified
Stability ¹		±0.1% of Full Scale
Measurement Mode		Relative or Absolute

Laser Test Fixtures

Pin Configuration		User-Specified
Dimensions:		
Single Wide (HxWxD)	cm	~2.5 x 9.5 x 43.5
Materials		FR406 and Stainless Steel
Maximum Temperature	°C	170

System Control Computer and Supervisory Software

Computer	Dell® Optiplex, > 2.7 GHz Pentium® Dual Core processor, 2.0 GB ram, 160 GB hard drive, CD-ROM, Ethernet interface,
Display	17" Dell® Ultrasharp flat panel
Power Requirements, Computer	115/230VAC, 50/60 Hz, single phase, 6/3A autosensing > 5 minutes
Battery Backup	> 5 minutes
Operating System	Microsoft Windows XP Pro®
System Control Software	ReliaTest™
Source Code	C# source code provided with system

General

Size (HxWxD)	cm	168 x 92 x 102
Weight	kg	365
Power Requirements		180 - 264 VAC, 50/60 Hz, single phase, 30A

Notes

1. Stability measured over 1000 hours

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.