

precise

reliable

safe

# SIGNIFER



PHOTODIODE  
RELIABILITY AND  
BURN-IN SYSTEM

PRS-9330

# RELIABILITY AND BURN-IN

## SIGNIFER

### Reliability Testing

- Precise dark current measurement
- Accurate measurements over thousands of hours
- Constant current or constant voltage modes
- Stable photodiode control

### ReliaTest Software

- Real time burn-in test data
- CSV formatted data access in-situ
- Advanced graphing capabilities
- Run sequential burn-in test steps

### Individual Fixture Temperature Control

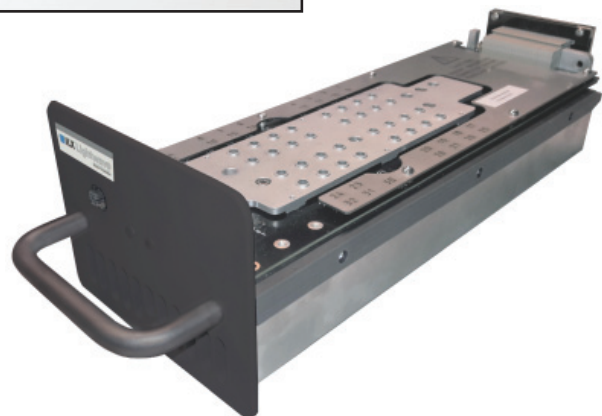
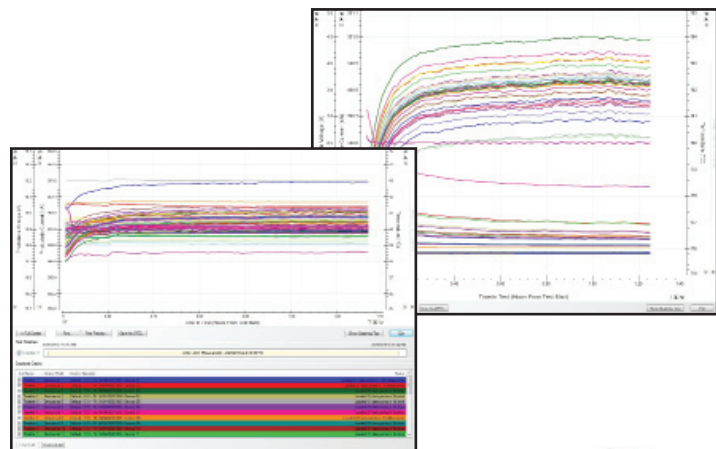
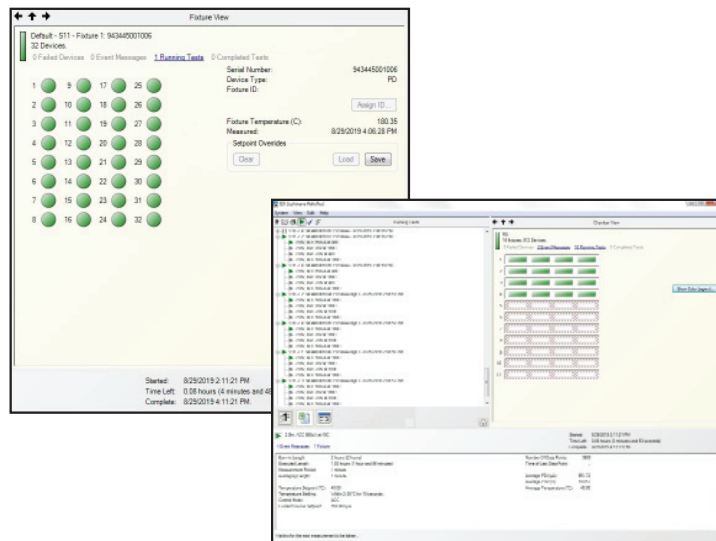
- Temperature range of 40°C to 180°C
- Long term stability
- Uniform temperature control
- Custom temperature ranges

### Flexibility

- Run up to 44 separate test sequences
- Up to 1408 channels
- 1 - 11 shelves
- Custom fixture designs

### Designed to Protect Your Device

- Built-in ESD safeguards
- Over voltage protection
- Over and under temperature protection
- Controlled shutdown on power failure



**Pioneering Photodiode Test**

**precise****reliable****safe****PRS-9330 SPECIFICATIONS**

	<b>Avalanche Photodiode (APD)</b>	<b>Photodiode (PD)</b>
System Capacity	Up to 1408 devices	Up to 1408 devices
Device Types Supported	TO-CAN, CoC, Custom	TO-CAN, CoC, Custom
<b>TEMPERATURE CONTROL<sup>1</sup></b>		
Temperature Control Range	40 - 180 °C	40 - 180 °C
Temperature Accuracy	±2.0 °C	±2.0 °C
Temperature Stability	±0.5 °C	±0.5 °C
<b>PHOTODIODE CONTROL</b>		
Operating Modes	Constant voltage, constant current	Constant voltage, constant current
Output Polarity	Bipolar	Bipolar
Photodiode Bias Voltage		
Range	-60 to 60V	-20 to 20V
Accuracy	±50 mV	±50 mV
Compliance Voltage (per device)	60V	20V
Drive Current		
Range	10 to 2000 µA	5 to 1000 nA
Setpoint Accuracy <sup>2</sup>	±2 µA	±10 nA
Setpoint Resolution	0.1 µA	0.1 nA
Operational Transients	<10 µA	<10 nA
Burst / Surge Transients (typical)	TBD	≤ 2 µA
<b>MEASUREMENT FUNCTIONS</b>		
Dark Current Measurement		
Range	10 to 2000 µA	5 to 1000 nA
Accuracy <sup>3</sup>	±2 µA	±10 nA
Resolution	0.1 µA	0.1 nA
Noise and Ripple	TBD	0.32 nA rms, + 0.4 nA PK/PK
Voltage Measurement		
Range	0 to 60V	0 to 20V
Accuracy	±50 mV	±50 mV
Resolution	10 mV	3 mV
<b>SYSTEM CONTROL COMPUTER AND SUPERVISORY SOFTWARE</b>		
Computer Type	Laptop	
Minimum Specifications	2 GHz Dual Core CPU, 16 GB RAM, 500 GB HDD	
Battery Operation	> 30 minutes	
Power Requirements	115 / 230 VAC, 50 / 60 Hz, single phase, 6A	
Operating System	Microsoft Windows® 10	
System Control Software	ReliaTest	
<b>GENERAL</b>		
Size and Weight	80 cm x 80 cm x 190 cm (37U); 560 kg (fully populated)	
Power Requirements	Dual phase, 220 - 240 VAC, 50 / 60 Hz, 10A	

**NOTES:**

1. Temperature control range depends on total power dissipated on the fixture. Stability measured over 1000 hours.
2. Accuracy in constant current, worst case.
3. Accuracy in constant voltage, all channels active.



## Proven Protection.

- Pioneer in device protection
- Drives down damaging transients
- Suppresses electrostatic discharges
- Trusted reliability and proven results

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

## Why Choose Us?

### Experience.

For over 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.

We have 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.

Our mission is to be the world leader in photonics instrumentation and test systems. We have been developing high performance reliability and burn-in test systems for over twenty years and continues to invest senior engineering resources to develop new systems.

### After Sales Support.

We understand 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 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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