

nimble

accurate

versatile

# SALUS



LASER DIODE  
CHARACTERIZATION  
SYSTEM

LCS-9408

# LASER DIODE CHARACTERIZATION SYSTEM

## SALUS

### Integrated Carrier Solution (ICS)

- One-time device population for minimal handling between test stages
- Simple mounting and removal in Salus system
- Fully customized to your device under test



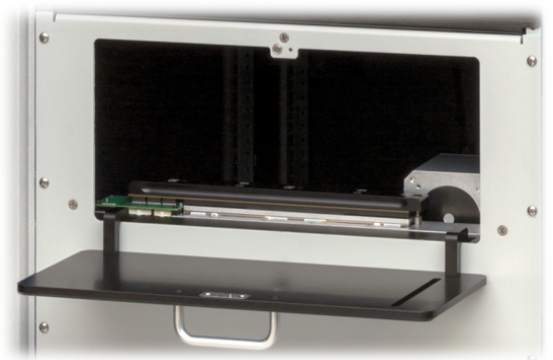
Expanded Integrated Carrier Solution (ICS) with up to 32 individual device mounting locations

### Precision Device Characterization

- $\pm 0.1$  mA current setpoint accuracy
- $\pm 1.5\%$  optical power accuracy
- Less than 25 seconds test time per device
- $25^{\circ}\text{C}$  to  $70^{\circ}\text{C}$  range with  $\pm 0.2^{\circ}\text{C}$  accuracy

### Ethos Control Software

- Electrical (LIV) and spectral ( $\lambda_p$ , SMSR) validation
- Program pass / fail specification limits
- Touch screen and keyboard interfaces



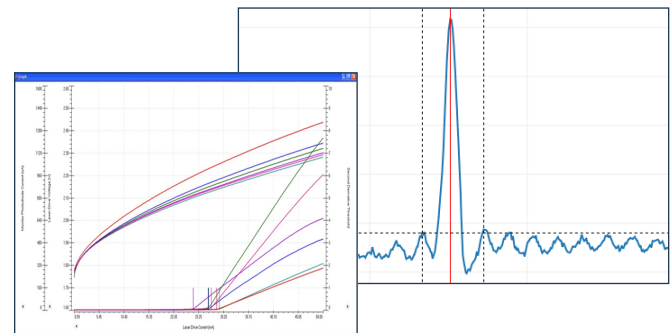
Front panel loading bay for intuitive ICS installation and transferring

### World Class MKS Performance

- High accuracy ILX optical power measurement
- High stability ILX temperature control
- Ultra precise Newport motion stages

### Designed to Protect Your Laser

- Over current protection
- Over and under temperature protection
- Embedded UPS for continued operation during facility power outages



Ethos software for validating electrical (LIV) and spectral performance

# PRELIMINARY

Custom Design the System to Your Needs

nimble

accurate

versatile

## LCS-9408 PRELIMINARY SPECIFICATIONS

System Capacity	Up to 32 devices
Device Types Supported	TO-Can, TOSA, COC, Custom Customer Packages
TEMPERATURE CONTROL	
Temperature Range	25°C - 70°C
Temperature Accuracy	$\pm 0.1^\circ\text{C}$ at 25°C; $\pm 0.2^\circ\text{C}$ over full range
Temperature Uniformity	$\pm 0.1^\circ\text{C}$ at 25°C; $\pm 0.2^\circ\text{C}$ over full range
LASER CONTROL	
Laser Drive Current	
Range	0.1 - 500 mA
Setpoint Accuracy	$\pm 0.1$ mA
Stability	$\pm 0.1$ mA
Resolution	$\pm 0.02$ mA
Compliance Voltage	Up to 8V
Voltage Accuracy	$\pm 20$ mV
LASER MEASUREMENTS	
Optical Power Measurement Range	-35 to +20 dBm (100 mW)
Optical Power Accuracy <sup>1</sup>	$\pm 1.5\%$
Optical Power Repeatability	1%
Wavelength Measurement Range <sup>2</sup>	C-Band (1510 - 1570 nm) O-Band (1265 - 1355 nm) Additional bands available
Peak Wavelength Accuracy	+0.05 nm
SMSR Measurement	> 40 dB
GENERAL SYSTEM SPECIFICATIONS	
Power Requirements	220-240 VAC, 50/60 Hz, 30A, single phase
Uninterruptable Power Supply (UPS) Coverage Time	> 30 minutes
System Control Software and Interface	Ethos; touchscreen and keyboard

1) Noted optical power accuracy for most wavelengths.  $\pm 3.5\%$  accuracy over full range. Contact Newport for more information.

2) Single selectable wavelength range upon ordering; 100 nm customized band within 800 - 1600 nm range available.

### Complementary to ILX LMS-9406 Limited Monitoring Burn-In System

- Uses ICS carrier solution between burn-in and characterization
- Up to 1408 channels, temperature range of 40°C to 150°C
- Collects LD voltage, setpoint current, and temperature readings at set intervals during burn-in





## Proven Protection.

- Pioneer in laser diode protection
- Drives down laser 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. ILX continues to develop and deliver laser diode protection features that are the standard for laser diode control.

## 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.

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. 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.

(406) 586-1244 • (800) 459-9459 • [sales@ilxlightwave.com](mailto:sales@ilxlightwave.com) • [www.newport.com/ilxlightwave](http://www.newport.com/ilxlightwave)