

# OP925

## Continuous Wave Return Loss and Insertion Loss Meter



### PRODUCT OVERVIEW

The OP925 is a compact test solution designed to meet the speed and efficiency needs of simplex patch cord testing. Built to measure insertion loss (IL), return loss (RL), and optical power on single mode and multimode patch cords, this system performs tests with the level of ease and accuracy that OptoTest is known for.

The intuitive design of the front panel makes it easy to perform these tests and obtain both relative (dB) and absolute (dBm) results. RL measurements are done through continuous wave reflectometry method (OCWR or CW), while IL measurements follow the standard continuous wave method. The easy-to-read display allows users to view the insertion loss and return loss measurements for both wavelengths, removing the need to toggle between multiple screens.

### KEY FEATURES

- Compact (21.2cm x 10.2cm x 30.5cm) benchtop instrument for all-in-one operation
- Full functionality via front panel display
- High speed USB interface for remote control via OptoTest Software Development Kit
- Single or dual wavelength measurement for IL and/or CW RL
- Standalone OPM and Source modes
- Efficiently tests all standard simplex connectors (FC, SC, LC, etc.), with angle and flat polish\*
- Supports testing of optical components with high reflectance and/or no throughput
- Wide dynamic range for RL measurements (single mode 0 to -65dB | multimode 0 to -45dB)

\* some flat polish assemblies require use of termination stub/mandrel/etc.



#### CALIBRATION

This product can be calibrated in-house, on-site, or remotely.



#### WARRANTY

OptoTest offers a three-year warranty on this product.

### APPLICATIONS

- Total Back Reflection Measurements
- Component Back Reflection Testing

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### SOFTWARE

The unit can also be controlled through USB with custom applications created using DLLs in the OptoTest Software Development Kit.

### PRODUCT SPECIFICATIONS

OP925	Single Mode	Multimode
Source Wavelength	1310nm, 1550nm	850nm, 1300nm
Output Power (typical)	0dBm to -2dBm	-17dBm to -20dBm
OPM Linearity (1mm InGaAs)	Deviation $\pm 0.05$ dB   +3dBm to -65dBm at 1490nm Deviation $\pm 0.01$ dB   <10dB power variation	
Source	Type: Fabry-Perot Laser Central Wavelength: $\pm 30$ nm Bandwidth (FWHM): <20nm	Type: LED Central Wavelength: $\pm 30$ nm Bandwidth (FWHM): <140(850) <200 (1300)
RL Dynamic Range	0 to -65dB	0dB to -45dB
Backreflection Accuracy (dB) <sup>(1)(2)</sup>	$\pm 0.5$ dB(0 to -45dB), $\pm 1$ dB (-45 to -55dB), $\pm 2$ dB (-55 to -65dB)	$\pm 1$ dB (0 to -30dB), $\pm 2$ dB (-30 to -45dB)

<sup>(1)</sup> Accuracy decreases by 0.5 dB for every 5 dB beyond -45 dB

<sup>(2)</sup> Return Loss Accuracy relies heavily on back end termination of the DUT

Mainframe	OP925
Dimensions	21.2cm x 10.2cm x 30.5cm
Power Supply	90VAC ... 264VAC; 47Hz to 63Hz; 0.7Amps (115VAC) 0.4Amps (230VAC); Fuse: T1A, 250V
Warm-up time	5-15 minutes
Operating Temperature	5°C to 40°C
Maximum Relative humidity <sup>(1)</sup>	80%

<sup>(1)</sup> For temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C.

#### Laser Classifications

All **Single Mode OP925 Sets** utilize a **Class I Laser Source**. OptoTest strongly suggests that all necessary precautions be taken whenever any Class I or Class III laser source is used.

Specifications are subject to change, please confirm specific performance characteristics of the product at the time of ordering. All specifications are valid within temperature range of 18°C to 24°C unless otherwise noted. For additional specifications please contact OptoTest.



#### MADE IN THE USA

We proudly design & manufacture our equipment in California, United States.



#### ISO CERTIFIED

Our Quality Management System is certified and in compliance with ISO 9001:2015.

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Product specifications and descriptions in this document are subject to change without notice.  
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