

OP940-CSW

Compact Multichannel Insertion Loss & Return Loss Meter



PRODUCT OVERVIEW

The compact multichannel OP940 is an internally switched Insertion Loss (IL) and Return Loss (RL) meter designed for MPO/MTP® testing. With a design that reduces setup time, cost, risk, and footprint, the **OP940-CSW** is the evolution of the MPO/MTP® testing experience that is used worldwide by industry leaders. **The fastest and most accurate IL and RL test system in the industry is better than ever.**

KEY FEATURES & BENEFITS

- **Simplified Test Setup**

The compact multichannel OP940 measures quickly and accurately without the use of mandrels or index matching gel.

- **Fastest IL/RL Measurement**

A 12 channel, dual wavelength, IL and RL test with the compact multichannel OP940 takes less than 60 seconds.

- **MPO/MTP® Interface**

The compact design of the OP940-CSW significantly reduces time and cost. With an MPO/MTP® front panel interface, there is no need to use expensive fanout cables that over-complicate the cable setup and more time-consuming to prepare. The reference and measurement processes are faster, more efficient, and less prone to error than ever before.

- **Most Accurate RL Measurement**

The compact size of the OP940-CSW was achieved without compromising quality or accuracy. By making use of a wide dynamic range (SM, FTTX: -10dB to -80dB) for RL measurements, the OP940-CSW is able to adjust for attenuation in the reference setup, which results in the most accurate RL results in the industry.

* MTP is a registered trademark of US Conec Ltd.



CALIBRATION

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



TECH SUPPORT

Our team of experts is ready to assist with your setup.



WARRANTY

OptoTest offers a three-year warranty on this product.

APPLICATIONS

- Manufacturing Testing
- R&D Testing



MADE IN THE USA

We proudly design & manufacture our equipment in Camarillo, California



ISO CERTIFIED

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



Visit www.optotest.com or contact one of our sales engineers at +1 (805) 987-1700 | sales@optotest.com to learn more.

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PRODUCT SPECIFICATIONS

Return Loss	Single Mode, FTTX
Source Wavelength	1310nm, 1550nm 1490nm ⁽¹⁾ , 1625nm ⁽¹⁾
Calibrated Measurement Range	-10dB to -80dB
Measurement Linearity	±1dB (-12 to -72dB), ±2dB (-72dB to -75dB), ±5dB (-75dB to -80dB)
Distance Range	up to 2500 meters
Mandrel-free minimum distance	1.7 meters (both reflections <-45dB)

⁽¹⁾ FTTX only.



Insertion Loss	Single Mode	FTTX
Source Center Wavelength	±30nm from nominal	±30nm from nominal
Source Bandwidth	<10nm	<10nm
Internal Fiber	9/125µm (SMF28)	9/125µm (SMF28)
Launch Condition	N/A	N/A
Output Power (typical)	-3.5dB	-4.5dB
Insertion Loss Stability ⁽¹⁾	±0.02dB	±0.02dB
Measurement Linearity (Relative Accuracy)⁽²⁾		
Deviation ± 0.05dB	0dBm to -65dBm at 1490nm	
Deviation ± 0.01dB	<10dB power variation	

⁽¹⁾ Over 1 hour with a max. change of 1°C. ² For 1, 2, and 3mm detectors.

Measurement Timing	Single Mode	FTTX
IL and RL, Dual Wavelength	3s ⁽¹⁾	6s
Switching Time (Multichannel)	100ms	

⁽¹⁾ Measurement timing is per channel

Mainframe	OP940-CSW
Dimensions	30.5cm x 14.5cm x 22cm
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 ⁽¹⁾	80%

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

Laser Classifications

All **OP940 Insertion Loss and Return Loss Test Sets** utilize a **Class I Laser Source**. Unless otherwise noted, all **OP250**, **OP715**, and **OP750** source units with internal laser sources utilize a **Class I Laser Source**. Unless otherwise noted, all **OP815** and **OP850 Insertion Loss Test Sets** with internal laser sources utilize a **Class I Laser source**. All **OP280 Visual Fault Finder** units utilize a **Class III 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.