

## Bidirectional IL/RL Test System

### How Efficient is your Production Line?

In order to maximize your bottom line, efficiency in your production line is critical. One of the biggest bottlenecks of loss testing is flipping the cable to get results for the second connector end. The time spent cleaning and reconnecting the cables can significantly slow down the process. If your throughput isn't where it needs to be, an equipment upgrade could be your solution. Bidirectional testing is one way to minimize testing time as it reduces the amount of time that an operator would need to clean and inspect cables during the testing process. Once the DUT is connected, both connector ends can be tested in sequence.

### Maximize your Efficiency

Designed to maximize efficiency, the new **OP725-OP940 Bidirectional IL/RL Test System** provides a simple and cost-effective solution for accurate insertion loss and return loss testing. The system works by incorporating a high-quality 2x2 MEMS switch into the existing functionality of the **OP940**.

Additionally, the two units integrate seamlessly without software. The OP725, a smaller version of the **OP720 Optical Switch**, can also be controlled by a computer using our **OPL-PRO**, **OPL-MAX** or **OPL-LOG** software.

When connected to an OP725, the OP940 gains added functionality in most of its mode screens, including Dual IL/RL and Scan Mode. This allows operators to get real-time IL/RL results or reflectance scans in either direction in less time.

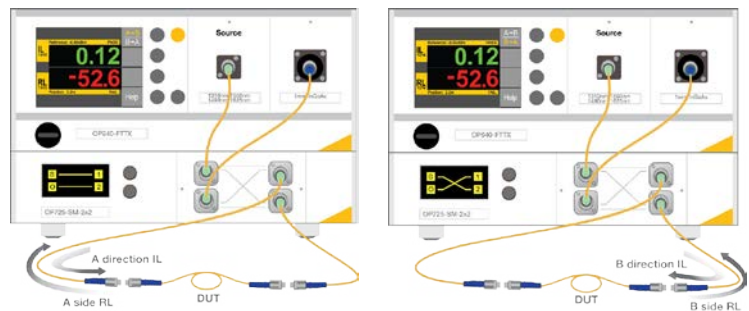


Figure 1: The OP725-OP940 Bidirectional IL/RL Test System launches light in both directions for its insertion loss and return loss measurements, giving truly bidirectional results.

|      |       |    |                                     |
|------|-------|----|-------------------------------------|
| 1310 | 0.120 | dB | <input checked="" type="checkbox"/> |
| 1550 | 0.103 | dB | <input checked="" type="checkbox"/> |
| 1310 | 78.55 | dB | <input checked="" type="checkbox"/> |
| 1550 | 79.68 | dB | <input checked="" type="checkbox"/> |

Figure 2: OPL-PRO provides real-time IL/RL results for both directions with OP725-OP940 Bidirectional IL/RL Test System.

## Bidirectional IL/RL Test System

### Key Benefits

- Fully automated, concurrent dual wavelength IL and RL measurements with no mandrel wrapping
- Bidirectional operation; measuring total insertion loss and individual return loss
- External power meter for uni-directional operation
- On-board, InGaAs optical power meter features measurement range reaching -65dBm
- Available in multimode and single mode
- Quad-wavelength (FTTX) single mode model also available upon request
- Controlled launch condition (underfill, fully filled, overfill) available for multimode fiber
- Wide dynamic range on return loss measurements:
  - 10dB to 80dB for single mode
  - 10dB to 58dB for multimode
- Can be controlled remotely via USB using OPL series software or OptoTest DLLs
- Integrated temperature monitoring
- Convenient benchtop size (19-inch rackmount frame available upon request)

### Specifications

|  | Single Mode  | FTTX   | Multimode  |
|--|--|--|--|
| Source Wavelength                        | 1310nm, 1550nm   | 1310nm, 1550nm, 1490nm, 1625nm                                   | 850nm, 1300nm  |
| Calibrated Return Loss Measurement Range | -10dB to -80dB   | -10dB to -80dB   | -10dB to -58dB   |
| Return Loss Linearity                    | ±1dB<br>(-12dB to -72dB)   | ±1dB<br>(-12dB to -72dB)   | ±1dB<br>(-10dB to -45dB)   |
| Distance Range                           | 100 meters<br>(standard) / 2500<br>meters (Rep Rate<br>adjusted) | 100 meters<br>(standard) / 2500<br>meters (Rep Rate<br>adjusted) | 100 meters<br>(standard) / 2500<br>meters (Rep Rate<br>adjusted) |
| OPM Linearity                            | ±0.05dB (+3dBm to -65dBm at 1490nm)                              |  |  |



Figure 3: Model OP725-SM-2x2 paired with the OP940 IL/RL Meter

### Contact us

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