

# OP831

## Bi-Directional Insertion Loss

### Overview

#### Bi-Directional Insertion Loss Meter

The **OP831** is designed to perform bi-directional insertion loss measurements on single-fiber OR multi-fiber optic cables with optical switches. The integrated source and power meter together with the **OPL-PRO** application software allow for a fully automated bi-directional insertion loss analysis of the connected cable. This rack-mounted instrument can be equipped with either single wavelength or dual wavelength Laser or LED sources.



Model OP831 Bi-Directional Insertion Loss Meter

### Features

- Streamlines and automates bi-directional insertion loss testing
- On-board optical power meters feature relative accuracy of 0.02dB between 0dBm and -65dBm
- Wide variety of source wavelength options, including 635nm, 850nm, 1310nm, and 1550nm among many others
- Various types of sources including LEDs, Fabry-Perot Lasers, and VCSELs
- Customizable fiber type such as 9/125µm, 50/125µm, 62.5/125µm. Please contact Optotest for other options
- Many common source connector outputs such as FC, SC, and ST
- Can be controlled remotely via USB
- Integrated temperature monitoring
- Convenient 19-inch rackmount frame
- Can be used to test multi-fiber patchcords when paired with two **OP720** switches and software

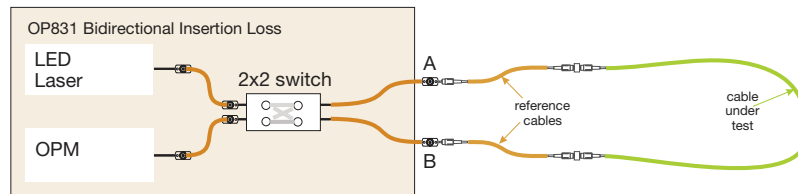
Doc: DSOP831 Rev. C 7/14/15

# OP831

## Bi-Directional Insertion Loss

### Applications

#### Bi-Directional Insertion Loss Test on Single Cable

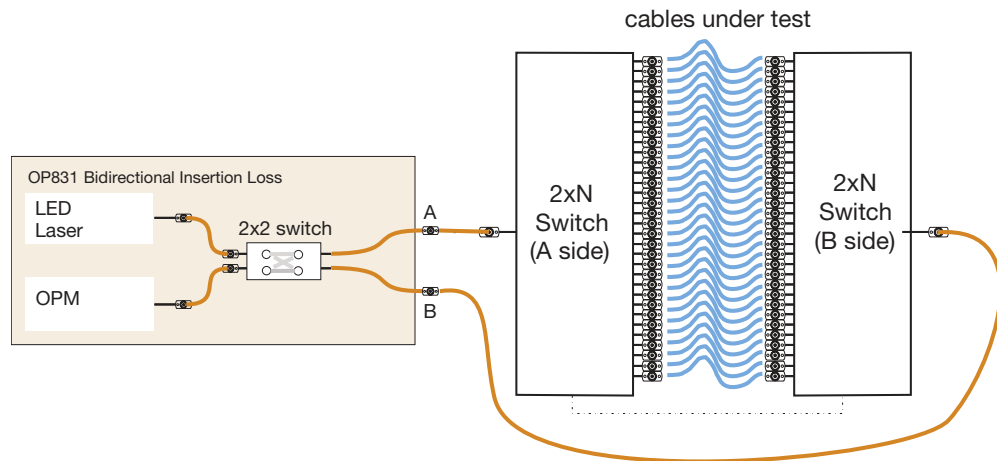


#### Test Report

Measurement	A-B 1310nm	A-B 1550nm	B-A 1310nm	B-A 1550nm	Avg 1310nm	Avg 1550nm	
#1 SNCBL 10101	-0.23dB	-0.32 dB	-0.21 dB	-0.34 dB	-0.22 dB	-0.33 dB	FAIL
#2 SNCBL 10102	-0.15dB	-0.26 dB	-0.17 dB	-0.26 dB	-0.16 dB	-0.26 dB	Pass
#3 SNCBL 10103	-0.08dB	-0.12dB	-0.11 dB	-0.13 dB	-0.10dB	-0.13 dB	Pass
#4 SNCBL 10104	-0.07dB	-0.07dB	-0.11 dB	-0.08 dB	-0.09dB	-0.07 dB	Pass

### Block Schematic

#### Multichannel Bi-Directional Insertion Loss Test System



Doc: DSOP831 Rev. C 7/14/15