

ILM-100 Insertion Loss Meter



Product Overview

The Insertion Loss Meter, ILM-100, was designed to measure insertion loss on fiber optic components quickly and accurately. The system has a built-in stabilized laser source for single-mode applications or LED source for multi-mode applications. With a dual wavelength configuration, insertion loss can be measured for two wavelengths in less than 1 second. ILM-100 system comes with both USB and ethernet control for ease of integration into test systems.

Features

- Compact benchtop instrument for all-in-one operation
- USB and Ethernet interface
- · Test software OPL-CLX available for logging measurements
- Fully automated single and dual wavelength insertion loss measurements
- Multi-mode instruments available with define launch conditions (EF, AS100, 70/70, etc.)
- · Various detector options
- Customizable sources and fiber types
- · Interchangeable adapter interface



Applications

- · Cable assembly testing
- Optical alignment
- · Signal monitoring



Compliance

• IEC-61300-3-4





USB and Ethernet Communication

With both USB and Ethernet communication interfaces, the ILM-100 can be easily integrated into any production automation environment. The ILM-100 is compatible with the OPL-CLX software, perfect for performing cable assembly measurements, recording results in database and printing results.

Multi-mode Launch Condition Control



ILM-100 multi-mode sources can be internally configured to meet launch condition requirements for specific applications. No need to have an external modal conditioner.



Customizable Source and Detector Types

ILM-100 can accommodate many different fiber optic source types depending on your requirements: DFB, FP, LED, etc. Along with many different fiber types and optical power meter types, ILM-100 is one of the most configurable insertion loss meters on the market.

II M Optical / Flectrical Specifications

Parameter Parameter	Specification		
	Single-mode	Multi-mode	
Fiber Type (µm)	9/125	50/125, 62.5/125 or 100/140	
Launch Condition	N/A	Available upon request	
Nominal Wavelengths (nm)1	1310 / 1490 / 1550 / 1625	850 / 1300	
Output Power (typical) (dBm)	0	-18 / -21	
Source Stability (dB) ²	± 0.02		
Detector Type	1 mm InGaAs / 3 mm InGaAs		
Power Range (dBm)	6 to -72 / 3 to -72		
Detector Linearity (dB) ³	± 0.02 (< 10 dB)		
	± 0.05 (> 10 dB)		
Detector Total Uncertainty (dB)4	± 0.25		
Remote Interface	USB or Ethernet		
Display	4.3" touch screen		
Power Supply	Input: 90 - 264 V AC, 47 - 63 Hz		
	Output: 18V DC, 5 A		
Power Consumption (VA)	36 maximum		

- ¹ Custom sources available upon request
- ² Over 1 hour with maximum temperature variation of 1 °C
- ³ Measured at 1490 nm, between 3 to -65 for 1 mm, 0 to -65 for 3 mm
- ⁴ At calibration conditions for all NIST traceable wavelengths



Parameter	Specification
Max Channel Count	24
Unit Dimension W x H x D (cm)	42.5 x 8.9 x 20.3
Operating Temperature (°C)	5 to 40
Humidity (Non-condensing)	Maximum 80% RH1

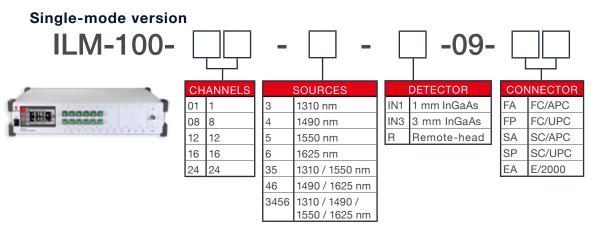
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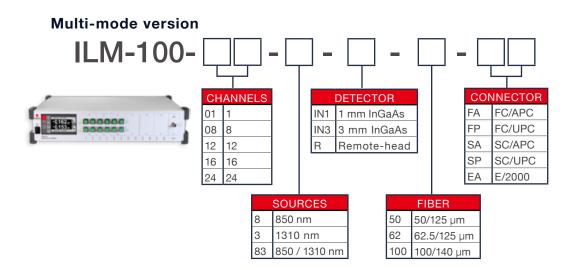
 $^{^{1}}$ From 5 to 31 °C, decreasing linearly to 50% RH at 40 °C



Ordering Scheme & Instructions

1. Configure ILM Insertion Loss Meter









ILM-100- Insertion Loss Meter

• ILM-100

• 18V AC-DC Power Supply

Power Cable

• USB Cable





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