Multifiber IRL Meter

Dimension Multifiber IRL meter uses a high stability laser source and a high precision optical power meter for mandrel-free return loss testing and high-speed insertion loss testing. The single-wavelength loss test time is less than 0.5s, and the minimum loss detection can be achieved -75dB. Includes 6 testing wavelengths for single mode and multiple mode (multiple mode :850nm, 1300nm, single mode :1310nm, 1490nm, 1550nm, 1625nm).The optimized integrating sphere can measure the loss of a dense multi-core MTP/MPO connector as well as the loss of a duplex-LC device. RLM fast and accurate measurement function make it an ideal tool for improving production efficiency and quality control.

Main Features

- Platform + module design, multi-application and scalable
- RL mandrel-free test, dual wavelength test speed less than 1s
- RL minimum detectable down to -75dB(single mode)
- Minimum measuring fiber length 0.7m
- Minimum detection power of optical power meter -70dBm (Not using the integral sphere)
- Rich interchangeable, high reliability detector adapter
- Support network, USB connection etc control methods
- Auto save test data + report, support remote control function

Applications

- Fiber patchcord and connector performance test
- Other optical passive device performance test

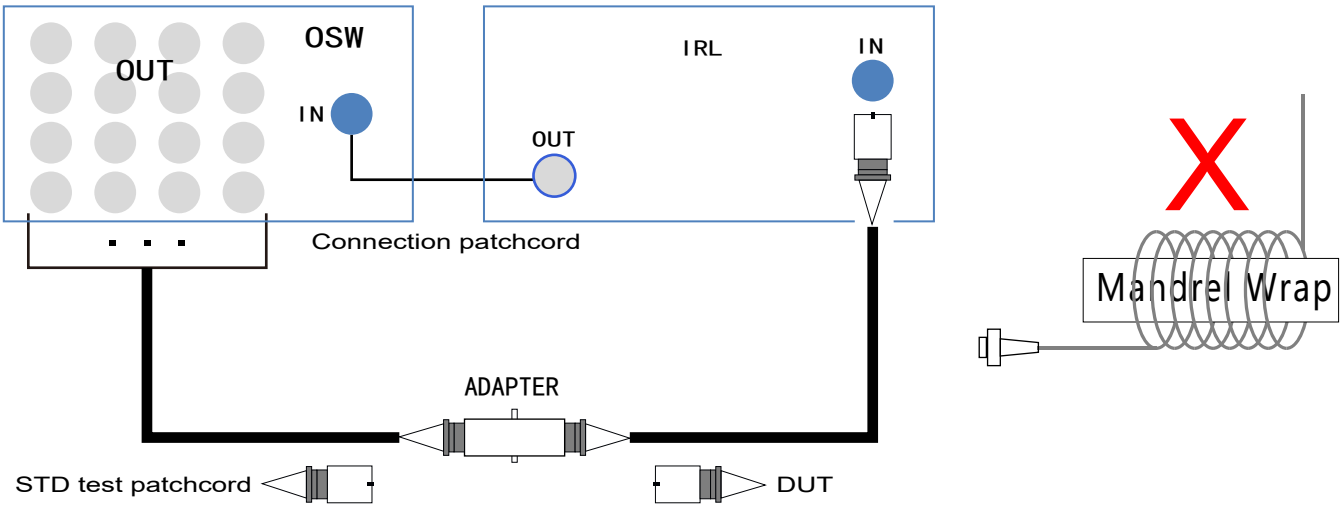
Platform + module design, high scalability

Dimension's 11-slot OMEGA universal optical test platform provides a whole set optical test solution, which is compatible with a wide range of functional test modules such as IRL test module. With hot swappable, programmable, and scalable, easy to maintain&manage, with low overall cost.

Users can integrate and expand different functional modules in following-up, such as optical switches, stable light sources, POA testers, BER testers, and high-speed optical power meters, to achieve one-stop test for optical devices and other products' various performances.

RL mandrel-free test, dual wavelength test speed less than 12s (MPO12)

Based on the principle of optical time domain reflection(OTDR) detection, the return loss test is realized without winding. The integrated design test module can realize insertion loss and return loss testing simultaneously. Using high speed sampling circuit and algorithm optimization, the speed of dual wavelength test is less than 12s (MPO12) .

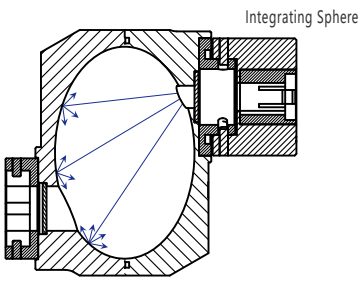


RL minimum detectable down to -75dB(single mode), Minimum measuring fiber length 0.7 m

Using the dimension self-developed high-sensitivity detection circuit and the optimized software algorithm, RL can achieve the detection of -75dB(single mode), which can meet the detection requirements of high-performance single mode patchcord (SM/APC).

Rich interchangeable, high reliability detector adapter

To meet the needs of customers, dimension has developed a series of interchangeable, high reliability detector adapter, that are flexible and convenient to use. Optimized integrating sphere, compatible with MPO/ duplex LC adapters, no need to repeatedly plug and plug in one test.



Software UI concise and clear, easy and useful

Based on years of customer feedback, the deeply optimized software UI is concise and clear, easy and useful. Users can customize the test report, can automatically save, upload test data and report to the server.

Specifications

IRL Meter Specifications

Basic product model		RLM1112A-1FA	RLM5156A-1FP
OPM section	Module Type	SM	MM
	Detector type	InGaAS	
	Detector size	2mm	
	Wavelength range	850nm ~ 1650nm	
	Power range	+15dBm ~ -70dBm at 1550nm(Not using the integral sphere)	
	Linearity	±0.05dB (+5dBm~-50dBm)	
	Uncertainty	± (5%+500pW)	
	Unit	dBm/dB	
IL section	Laser Wavelength	1310/1490/1550/1625nm	850/1300nm
	Laser Type	LASER	
	Power stability	±0.01dB (30 mins)	
	Fiber Type	SM 9/125	MM 50/125 or 62.5/125
	Connector Type	FC/APC	FC/UPC
	Encircled Flux Standard	NA	IEC-61280-4-1
RL section	RL Range	-30~-75dB	-15～-60dB
	RL Accuracy	-30 ~-65dB : ±1.0dB -65 ~-75dB : ±2.0dB	-15 ~-30dB: ±1.0dB -30 ~-60dB: ±2.0dB
	Fiber length (Min)	DUT reflections (both ends)>50dB : 0.7m	
		DUT reflections (both ends)<50dB : 1.7m	
	Testing Time (s)	<12s (2 wavelength/MPO12)	
Mainframe	Input power	AC90~260V/50HZ	
	Warming up time	20 minutes (if the storage temperature is different from the service temperature, the preheating time is 60 minutes)	
	Recalibration period	2years	
	Working temperature	10℃～40℃	
	Storage temperature	-40℃～70℃	
	Size	ALPHA platform: 359mm×274mm×115mm, OMEGA platform: 462mm×374mm×171mm, Module: 285mmX133mmX71mm	

Detector Adaptors Selection Guide

Number	PN	Name	Description	Image
1	204810002	OPM FC adapter	Detection interface, suitable for FC connector	
2	204810003	OPM SC adapter	Detection interface, suitable for SC connector	
3	204810004	OPM LC adapter	Detection interface, suitable for LC connector	
4	204810007	OPM 2.5 ferrule adapter	Detection interface, suitable for FC/SC/ST ... connector and 2.5mm ferrule	

Number	PN	Name	Description	Image
5	204810006	OPM 1.25 ferrule adapter	Detection interface, suitable for LC/duplex LC /SN ... connector and 1.25mm ferrule	
6	204810014	OPM Integrating Sphere	Provide wide numerical aperture, can be used with MPO/ duplex LC adapters	
7	204810015	OPM MPO adapter	Detection interface, suitable for MPO12/MPO16 connector	
8	204810016	OPM duplex LC adapter	Detection interface, suitable for LC/duplex LC connector	
9	204810017	OPM Bare- fiber adaptor	Detection interface, suitable for bare-fiber power test application	

Ordering Information

RLM □ □ □ □ — □ □ □

Laser fiber type	
1	SMF-28e 9/125
5	MM 50/125
6	MM 62.5/125

Detector type	
1	InGaAs 2mm
2	InGaAs 5mm

Laser wavelength	
0	No laser
1	1310
2	1550
3	1490
4	1625
5	850
6	1300
X	Customized

RL test	
A	Mandrel-free
B	Mandrel
C	Mandrel+ Mandrel-free

Laser output port	
1	1CH
2	2CH

Laser connector type	
FA	FC/APC (SM)
FP	FC/PC (MM)

Eg,RLM1112A-1FA: Mandrel-free IRL test module,1310/1550,SM 9/125,InGaAs 2mm Laser output 1CH FC/APC

Note: RL test model A/C supports dual laser wavelength. Two-digit code represents two laser wavelengths. Customers can choose laser wavelength or customized laser wavelength in the list. Model B supports four single-mode wavelengths, and XX should be selected for the two-digit coding.

Related Products

MT Pro

Smartcheck

Offsoon Mark MT

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