

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 dual-wavelength loss test time is less than 0.6s, and the minimum loss detection can be achieved -80dB. 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 0.6s
- RL minimum detectable down to -80dB(single mode)
- Minimum measuring fiber length 0.7m
- Rich interchangeable, high reliability detector adapter
- Support network, USB connection etc control methods
- Software UI concise and clear, easy and useful
- Auto save test data + report, support remote control function

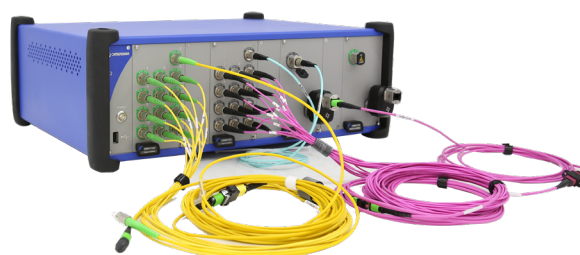
Applications

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

Platform + module design, high scalability

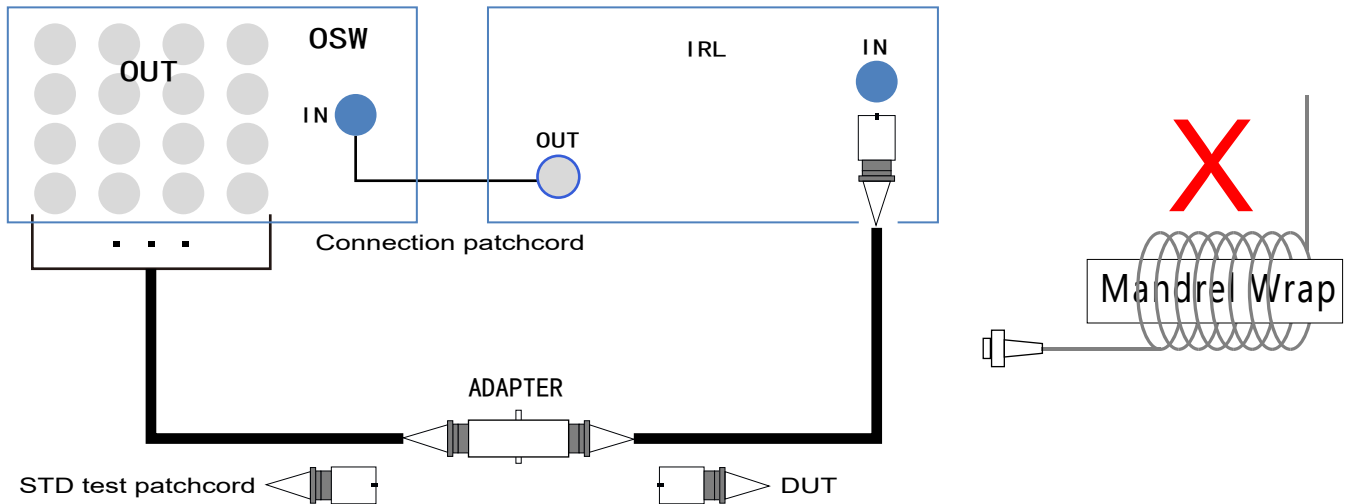
Dimension's 11-slot OMEGA universal optical test platform provides a whole set optical test solution, which is compatible with a wide range of functional test modules such as IRL test module. With hot swappable, programmable, and scalable, easy to maintain&manage, with low overall cost.

Customers can choose single-mode RLM module + multi-mode RLM module and matching optical switch in a single OEMGA chassis according to their own needs (the same chassis can achieve at most 24-core single-mode + multi-mode RLM integration), thereby achieving lower costs Single-mode and multi-mode integrated test solutions.



◀ 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 8s (In the fast test mode, the MPO12 single-mode dual-wavelength test speed is less than 7.2s, and the multi-mode dual-wavelength test speed is less than 8s) .



◀ RL minimum detectable down to -80dB(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 -80dB(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

Basic product model		RLM1412A-1FA-24	RLM5456A-1FA-24	RLM-L-1412A-1FA-24	RLM-L-5456A-1FA-24
Product series		Professional	Professional	Lite	Lite
light source	Fiber Type	SM 9/125	MM 50/125	SM 9/125	MM 50/125
	Wavelength	1310/1550nm	850/1300nm	1310/1550nm	850/1300nm
	Source Type	Laser	LED/Laser	Laser	LED/Laser
	Encircled Flux Standard	NA	IEC-61280-4-1	NA	IEC-61280-4-1
IL section	IL Stability*	±0.01dB(<0.5H) ±0.02dB(<8H)		±0.02dB(<0.5H) ±0.03dB(<8H)	
	IL Repeatability*	±0.02dB			
	IL Accuracy*	0~1dB:±0.02dB 1~10dB:±0.1dB 10~15dB:±0.5dB	0~1dB:±0.02dB 1~10dB:±0.1dB 10~15dB±0.5dB	0~1dB:±0.02dB 1~10dB:±0.1dB 10~15dB:±0.5dB	0~1dB:±0.02dB 1~10dB:±0.1dB 1~10dB:±0.1dB
RL section	RL Range	-30~-80dB	-15~-60dB	-30~-72dB	-15~-55dB
	RL Accuracy	-30~-70dB:±1.0dB -70~-75dB :±2.0dB	-15~-50dB:±1.0dB -50~-55dB:±2.0dB	-30~-65dB:±1.0dB -65~-70dB:±2.0dB	-15~-50dB:±1.0dB -50~-55dB:±2.0dB
Others	Fiber length (Min)	DUT reflections (both ends)>50dB : 0.7m DUT reflections (both ends)<50dB : 1.5m			
	Once Testing Time	<0.6s(Fast mode)			
	Display resolution	0.01dB			
Mainframe	Input power	AC90~ 260V/50HZ			
	Warming up time	30 minutes (if the storage temperature is different from the service temperature, the preheating time is 90 minutes)			
	Recalibration period	2years			
	Working temperature	10℃ ~ 40℃			
	Storage temperature	-40℃ ~ 70℃			
	Size	ALPHA platform: 359mm×274mm×115mm,OMEGA platform;462mmX374mmX171mm Module: 285mmX133mmX71mm			

*All specifications given at temperature 23°C±1°C,after a 30-minute warm-up,with FC/PC connector.

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	

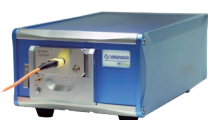
Ordering Information

Series		Laser fiber type		Detector type		Laser wavelength		RL test		Laser output port		Laser connector type		Number of cores	
-L	Lite	1	SMF-28e 9/125	1	InGaAs 2mm (Detachable integrating sphere)	0	640nm VFL	A	Mandrel-free (OMEGA-Standard)	1	1CH	FA	FC/APC	12	12
/	Pro	5	MM 50/125	2	InGaAs 3mm (Detachable integrating sphere)	1	1310	C	Mandrel-free (OMEGA-Lite)	2	2CH	FP	FC/PC	24	24
		6	MM 62.5/125	4	InGaAs 2mm (Fixed integrating sphere)	2	1550							48	48
						3	1490								
						4	1625								
						5	850								
						6	1300								
						X	Customized								

Eg: RLM1412A-1FA-24 24-core Mandrel-free OMEGA IRL test module Pro,1310/1550 ,SM 9/125 InGaAs 2mm, (Fixed integrating sphere), 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. RLM module can support 4 single-mode wavelengths (red light is not included in the four wavelengths), and the selection code can be followed by the same, such as selecting red light and 1310, 1550, 1625 as RLM-140124A-1FA.

Related Products



MT Pro



Smartcheck



Offsoon Pro

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