

TwoWay Fiber Polarity and Return Loss Meter



TwoWay fiber polarity and return Loss meter is a new product that Dimension uses innovative design concepts to solve the problems encountered in the current duplex fiber jumper test, which can realize the simultaneous automatic test of IL, RL and Polarity. The testing time of IL, RL and Polarity at the same time is less than 1.2s (fast mode),

which can greatly improve the testing efficiency and reduce the cost of test equipment investment. At the same time, it also guarantees the reliability of IL and RL measurement under the premise of improving efficiency.

The minimum can achieve -80dB Return loss detection (single mode). TwoWay's fast and accurate measurement function is an effective tool to improve production efficiency and quality control.

Main Features

- Three-in-one automatic test of duplex fiber IL,RL and polarity
- RL mandrel-free test, IL,RL and polarity test time is less than 1.2s
- Reduce test work station and increase production test efficiency by more than 300%
- RL minimum detectable down to -80dB(SM)
- Minimum measuring fiber length 0.7 m
- Support single-core and duplex LC, CS, SN, MDC and other fiber patchcord tests.
- Rich interchangeable, high reliability detector adapter
- Support physical button, touchscreen, network, USB control methods
- Platform + module design, multi-application and scalable
- Support PC-side control software, automatic saving test data/report, support remote network control

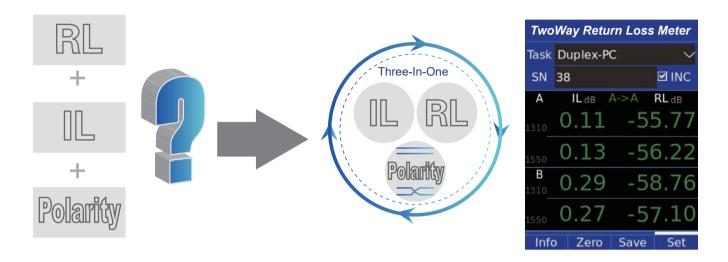
Applications

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



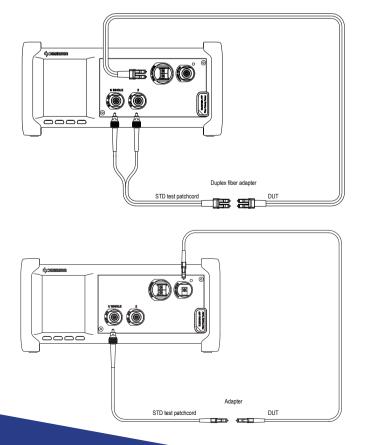
Three-in-one automatic test of duplex fiber IL,RL and polarity

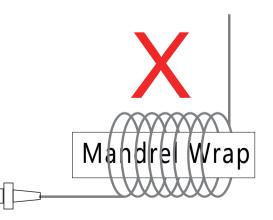
TwoWay fiber polarity and return Loss meter can quickly complete the winding-free return loss and insertion loss test of the duplex fiber jumper. At the same time, it can realize the polarity detection of the duplex fiber, and truly realize the three-in-one automatic loss and polarity test.



RL mandrel-free test, IL,RL and polarity test time is less than 1.2s

TwoWay is based on the principle of optical time domain detection to realize the winding-free return loss test. Using high-speedsampling design and software optimization algorithm, the total time of insertion loss, return loss and polarity detection is lessthan 1.2s (fast mode)

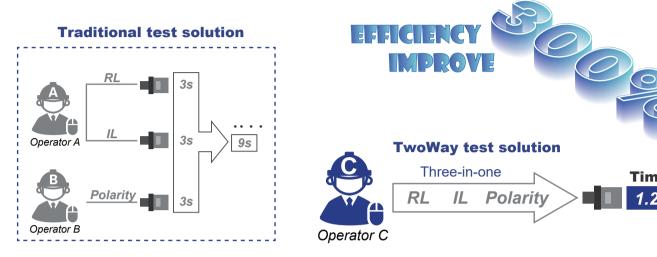






Reduce test work station and increase production test efficiency by more than 300%

TwoWay fiber polarity and return Loss meter can automatically test IL, RL, and Polarity at the same time, eliminating the need for employees to switch between testing IL/RL and polarity multiple times to switch testing STD jumpers and equipment.IL, RL, Polarity test time is less than 1.5 s at the same time (fast mode), the test efficiency is improved by more than 300%, and the customer's test equipment investment cost can be reduced at the same time.



RL minimum detectable down to -80dB(SM), Minimum measuring fiber length 0.7 m

TwoWay use the Dimension self-developed high-sensitivity detection circuit and the optimized software algorithm, RL can achieve the detection of -80dB(SM), which can meet the detection requirements of high-performance single mode patchcord (SM/APC).

TwoWay Return Loss Meter						
Task	Duplex-	NPC	\sim		÷	
SN	58		☑ INC		Task	eck
А	IL dB	A->A	RL dB		Dual	Core
1310	0.10	-7	5.77		λ(nm)	
 1550	0.13	-7	6.22		1550 1310	0.2
B 1310	0.09	-78	8.76		Nev	N
1550	0.08	-7	7.10		Impo	ort
Info	o Zero	Save	Set		Tab	1

Setting								
Task		Duplex-APC			\sim			
🗹 II	. Ch	eck	Ŀ	🗹 RL Check 🗹 Quick				
	🗹 DualCore 🔲 CrossLine 🔲 Polarity							
λ(n	λ(nm) IL(d				IL Compensate Co			
15	1550 0.2		2					
13	1310 0 .2		2				•	
N	New			Edit		De	Delete	
Im	Import			Export B		ack		
Ta	Tab 🔨 Enter							

Time

1.2s

Rich interchangeable, high reliability detector adapter, compatible with single fiber/ duplex fiber test

To meet the needs of customers, Dimension has developed a series of interchangeable, high reliability detector adapter, including duplex LC, SN, CS, MDC new connectors, that are flexible and convenient to use, and test loss and polarity at one time, no need re-plug.









Support PC-side control software, automatic saving test data/report, support remote network control

Concise and clear software UI design, users can customize test reports, and can automatically save and upload test data and reports.





Platform + module design, multi-application and scalable

Dimension's universal optical test platform provides a whole set optical test solution, it includes a dual-slot ALPHA test platform and an 11-slot OMEGA test platform, which is compatible with a wide range of functional test modules such as IRL test module. With hot swappable, rogrammable, and scalable, easy to maintain&manage, with low overall cost. Supports many remote control modes, including network, USB, touch screen and physical button, etc.

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.





Specifications

Basic product model		RLM1312A-2FA	RLM5356A-2FA	RLM-L-1312A-2FA	RLM-L-5356A-2FA		
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 Stability*	±0.01dB(< ±0.02dB(±0.02dB(<0.5H) ±0.03dB(<8H)			
	IL Repeatability*	±0.02dB					
IL section	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		
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°C ~ 40°C					
	Storage temperature	-40°C ~ 70°C					
	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.



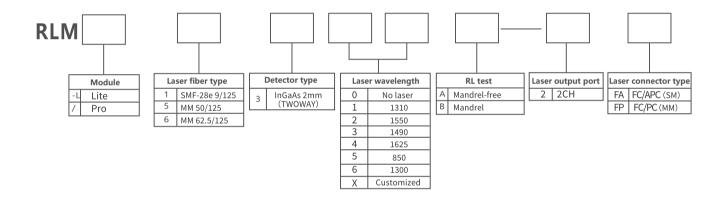
Detector Adaptors Selection Guide

Number	PN	Name	Description	Image
1	204910022	OPM duplex LC adapter (RLM use only)	Detection interface, suitable for LC/duplex LC connector(TwoWay RLM use only)	
2	204910026	OPM SN adapter	Detection interface, suitable for SN connector (TwoWay RLM use only)	SN Construction
3	204910027	OPM CS adapter	Detection interface, suitable for CS connector (TwoWay RLM use only)	CS
4	204910028	OPM MDC JR adapter	Detection interface, suitable for MDC JR connector(TwoWay RLM use only)	MDC
5	204910029	OPM MDC SR adapter	Detection interface, suitable for MDC SR connector(TwoWay RLM use only)	MOC
6	204810002	OPM FC adapter	Detection interface, suitable for FC connector	FO
7	204810003	OPM SC adapter	Detection interface, suitable for SC connector	
8	204810004	OPM LC adapter	Detection interface, suitable for LC connector	LG BUX
9	204810007	OPM 2.5 ferrule adapter	Detection interface, suitable for FC/SC/ST connector and 2.5mm ferrule	
10	204810006	OPM 1.25 ferrule adapter	Detection interface, suitable for LC/duplex LC /SN connector and 1.25mm ferrule	



Number	PN	Name	Description	Image
11	204810014	OPM Integrating Sphere	Provide wide numerical aperture, can be used with MPO/ duplex LC adapters	
12	204810015	OPM MPO adapter	Detection interface, suitable for MPO12/MPO16 connector	HE CO
13	204810017	OPM Bare- fiber adaptor	Detection interface, suitable for bare-fiber power test application	e ses

Ordering Information



Eg: RLM1312A-2FA TWOWAY Mandrel-free IRL test module Pro,1310/1550,SM 9/125,InGaAs 2mm (TWOWAY),Laser output 2CH FC/APC

- Note: 1. 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 A/B supports four single-mode wavelengths, and XX should be selected for the two-digit coding.
 - 2. Only single-mode lite version is available.



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TwoWay Meter