

Reliability Test System



Dimension's reliability test system can be assembled with different modules according to the needs. It is suitable for optical performance testing, environmental stability testing, and aging experiment testing of various existing optical passive devices on the market.

In order to make up for the shortcomings of traditional equipment that can only be tested at fixed locations, the system adopts the style of a trolley suitcase, and integrates the test equipment and the PC for processing data inside the box. There is no need to worry about the untimely data processing and information collection, and it can be moved and complete the entire test task independently. It is truly prepared for the field, and has great advantages in the field of manufacturing testing.

Key Features

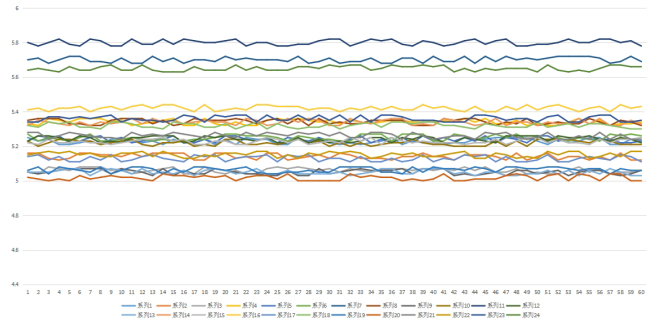
- Platform + module design, multi-application and scalable
- Moveable one-stop test system
- Real-time measurement and long-time stability monitoring
- Insertion loss and return loss are monitored simultaneously
- Low measurement error and high stability
- Supports multi-channel simultaneous testing up to 128ch

Applications

- Comply with various standards: GR-326-CORE, GR-1435-CORE, GR-910-CORE, GR-1209-CORE, GR-2866-CORE, Verizon FOC
- Optical Performance Testing of Optical Passive Devices
- Long-term stability test

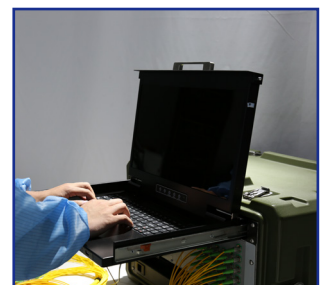
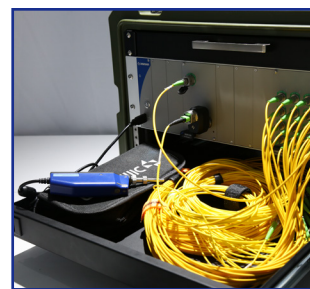
Platform + module design, multi-application and scalable

The 11-slot OMEGA universal optical test platform is compatible with various functional test modules including the RLM series insertion and return loss test modules, hot Plug-pull, programmable, highly scalable, easy to maintain and manage, and low in overall cost. Support network, USB, physical button control, it also integrates modules such as optical switches, highly stable light sources, and high-precision optical power meters to achieve reliability testing of passive devices.



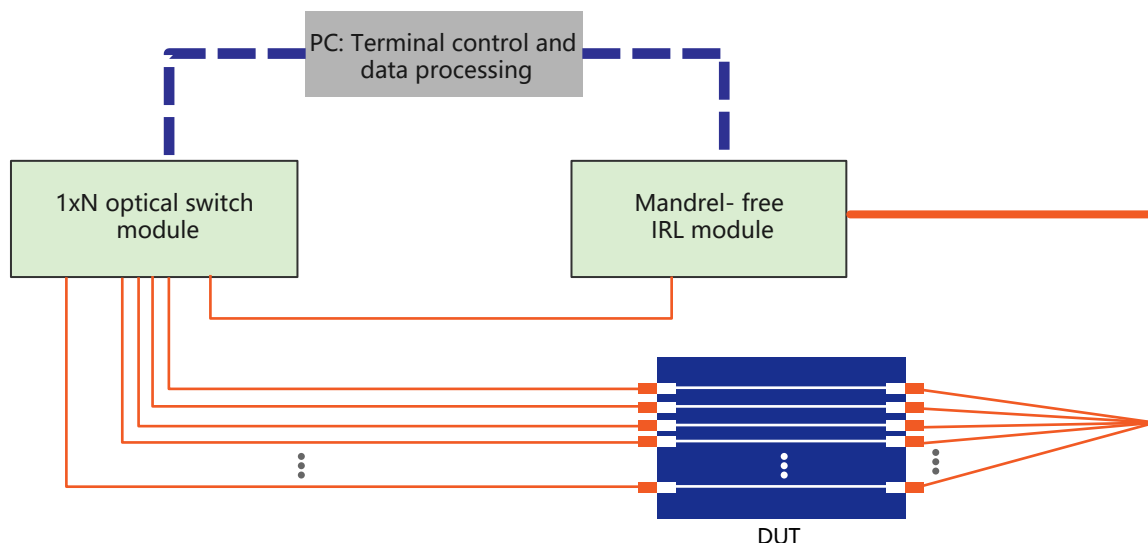
Moveable one-stop test system

In the style of a trolley suitcase, the test equipment and the PC for processing data are integrated inside the box. The equipment can be moved and can complete the entire test task independently.



High device integration, one system can complete all kinds of tests

Different from traditional testing methods, Dimension's reliability test system integrates the insertion and return loss test module, optical switch module, and light source to complete the one-time measurement of insertion and return loss, and can formulate relevant solutions for different environments.

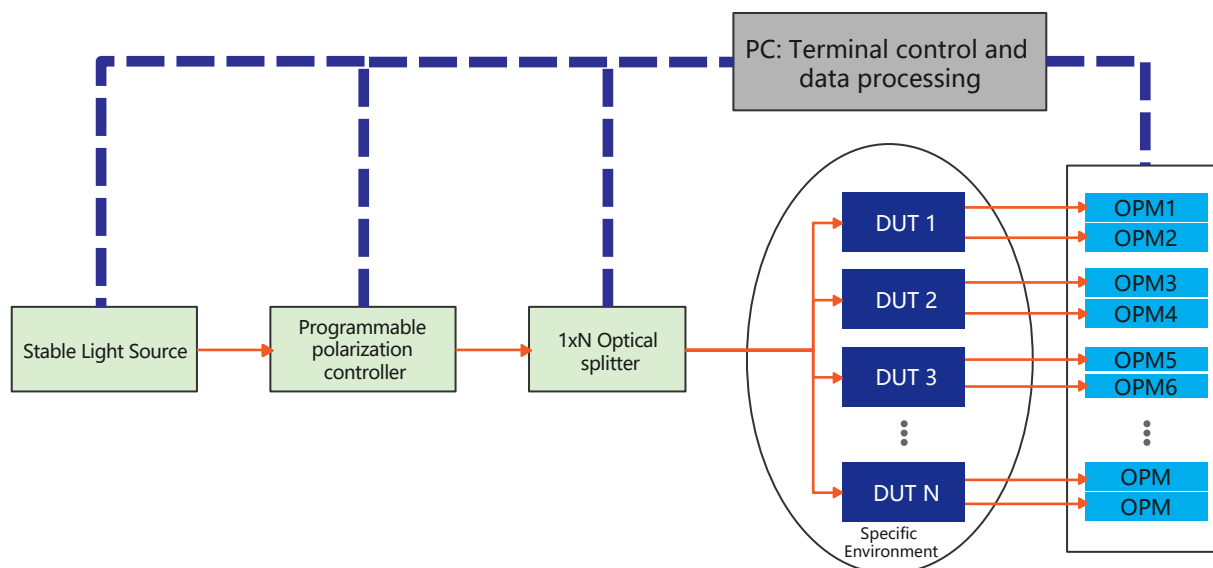


Specifications

Basic product model		RTS1112A-1FA-24
OPM section	Module Type	SM
	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%+500pM)
	Unit	dBm/dB
IL section	Channel	24CH
	Operating wavelength	1310/1550
	Insertion loss measurement accuracy	0~3dB: <+/-0.08dB
	Fiber Type	SM 9/125
	Connector Type	FC/APC
	Encircled Flux Standard	±0.01dB (30 mins)
RL section	RL Range	-30~-80dB
	RL Accuracy	-30~-65dB:±1.0dB; -65~-75dB:±2.0dB
	Test length range	2~1000米
	Testing Time (s)	<2s(single channel))
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°C~40°C
	Storage temperature	-40°C~70°C
	Size	OMEGA platform: 462mmX374mmX171mm

Testing for IL: Smaller Errors, Greater Stability

Use higher power and stable SLS light source, and perform light splitting through PLC to meet multi-channel simultaneous testing. Avoid the interference of external optical switching on the stability and uniformity of the test, and use the test link with higher stability to complete the single-to-single high-precision insertion loss stability test.



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	Linearity	±0.05dB (+5dBm~-50dBm)
	Uncertainty	± (5%+500pM)
	Power Resolution	0.001dB
Light source part	Fiber Type	SM 9/125;Panda PMF
	Wavelength	1270、1290、1310、1330、1350、1370、1390、1410、1430、1450、1470、1490、1510、1550、1570、1590、1625、1650
	Wavelength accuracy	±5nm
	Output power stability (24h)	±0.005dB
	Edge touch rejection ratio	> 50dB
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°C~40°C
	Storage temperature	-40°C~70°C
	Size	OMEGAplatform: 462mmX374mmX171mm