



RD-SP-100

Remote-head Integrating Sphere and Polarity Detector



Product Overview

Create the fastest and simplest multifiber cable assembly test station by adding the RD-SP Remote-head Integrating Sphere and Polarity Detector to your RLM Return Loss Meter and OSX Optical Switch. In a single step, you can now test polarity, IL and RL of multifiber assemblies such as MPO and duplex LC.

Designed with free-space optics, there is no physical contact to the detector to prevent damage to the cables you're testing. The RD-SP incorporates the second-generation integrating sphere developed by Santec and used in the industry-leading RLM and BRM. Combined with the polarity detecting technology used in the RD-P Remote-head Polarity Detector, the result is the ultimate simplification of the multifiber testing process.

The versatile RD-SP uses our interchangeable patented SD Slide Detector Adapters so you can still measure other connector types such as SC or LC. Use with our free Cable Assembly software to have all your IL, RL and polarity test results saved together in the XNS database.

Features

- Fast Pass/Fail results
- IL, RL and Polarity results saved together
- Compatible with SD Slide Detector Adapters



Applications

- MTP/MPO cable assembly mapping
- Single-fiber and multifiber assemblies
- Incoming inspection
- QA and R&D testing

Optimized for Speed



Connect your device to the RD-SP and click measure. On a 12-fiber DUT, a failed polarity will be detected in the first 4 seconds. A successful polarity, IL and RL test on a 12 fiber assembly at 2 wavelengths will take less than 35 seconds without any interaction from the operator during this time. The patented SD Slide Detector Adapters are another innovation designed to facilitate high throughput.

Designed for Accuracy

Manufactured as a single piece for the best performance in its class, the integrating sphere is ideal for measuring on multifiber connectors such as MPO, fiber arrays and wide area beams. The polarity detecting technology eliminates the need for a second switch and therefore removes the added uncertainty from the complex referencing required in the outdated method.



Custom Polarities



Using the advanced algorithms and smart technology developed for its predecessor, the RD-P, the RD-SP is equally capable of detecting custom mappings including dark channels.

Measure IL_A and IL_B Separately

You are no longer limited to measuring the total IL of your DUT as with the dual switch method. With the RD-SP, you can measure each connector IL separately and still get your polarity results without any extra steps.



Remote-head Integrating Sphere and Polarity Detector

Optical / Electrical Specifications

| Parameter | Specification |
|--|--------------------------------|
| Detected Polarities | A, B, C, D and custom mappings |
| Polarity Testing Time (12 ch) ¹ | <4 seconds |
| Polarity, IL and RL Testing Time (12 ch, 2 wav) ² | <35 seconds |
| Remote Interface | USB 3.1 and M12 |
| Display | 5" touch screen |
| Input Voltage | 5 V |
| Power Consumption (VA) | 320 mA @ 5 VDC |

Notes:

¹ USB 3.0, add 1 second for USB 2.0

² fast mode

Mechanical / Environmental

| Parameter | Specification |
|--|-----------------------------|
| Unit Dimension W x H x D (cm) | 11 x 10.6 x 8.4 |
| Shipping Box Dimensions W x H x D (cm) | 33 x 15 x 14 |
| Unit Weight (kg) | 1.5 |
| Total Shipment Weight (kg) | 1.7 |
| Operating Temperature (°C) | 0 to 40 |
| Storage Temperature (°C) | -20 to 60 |
| Humidity (Non-condensing) | 20 to 80% RH from 0 to 40°C |

Ordering Scheme & Instructions

1. Slide Detector Adapters

SD-



| TYPE | | | | | | | |
|------|-----------|------------|-------------------|-------------|----------------------|-----------|----------------|
| CAP | Cap | DSN | Duplex SN | BRF-BARREL | Barrel for SD-BRF | MT | MT |
| FC | FC | MPO | Universal MPO | FH-60 | Fujikura FJ-60 | MDC | MDC |
| SC | SC | U12 | Universal 1.25 mm | FHM-12 | Sumitomo FHM-12 | MDCMT | MDC MT |
| LC | LC | U25 | Universal 2.5 mm | SLED-BARREL | Barrel for SD-SLED-x | MPO-MICRO | Microlatch MPO |
| DLC | Duplex LC | BSF | Bare single fiber | ST | ST | | |
| TLC | Tri-LC | BFA-BARREL | Barrel for SD-BRF | E2000 | E2000 | | |
| DCS | Duplex CS | BRF | Bare ribbon fiber | MTRJ | MT-RJ | | |

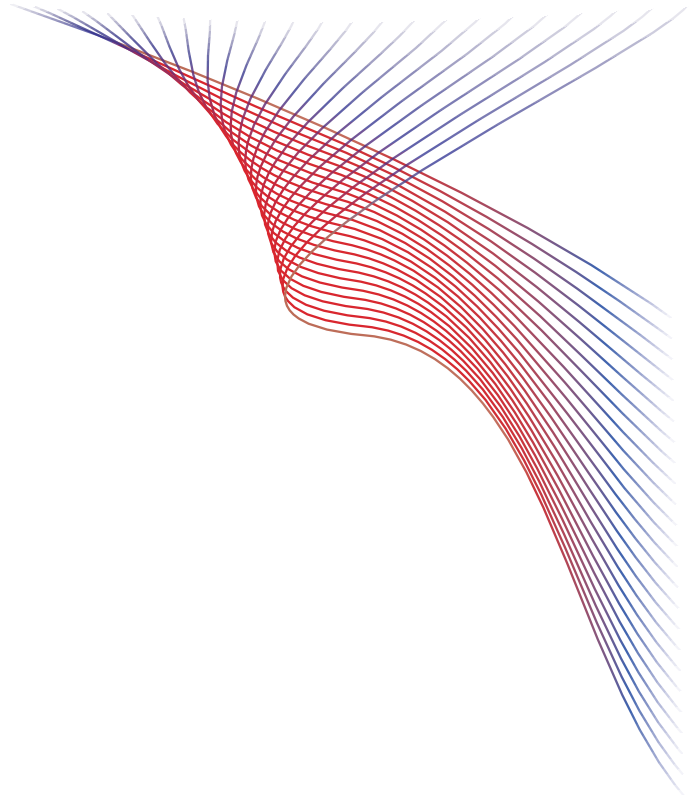
*many more detector adapters available upon request.



In the Box

RD-SP-100

- RD-SP-100
- M12 cable (1m)
- USB C to A cable (1.8m)
- Detector cap



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