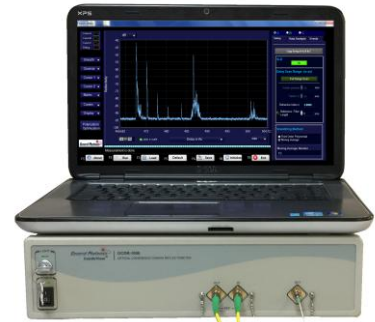


Optical Coherence Domain Reflectometer—InsideView™

InsideView™ is an optical coherence domain reflectometer (OCDR-1000) designed to obtain space-resolved reflection information inside a fiber optical component, such as a Photonic Integrated Circuit (PIC), for diagnosing quality or design issues. It is based on a polarization optimized white light interferometer proprietary to General Photonics. It performs the functions of the discontinued Agilent 8504B Reflectometer - and more - but with better polarization management, spatial resolution, and accuracy; larger scan range and dynamic range; and smaller size and weight. It is a low cost alternative to OFDR technology, with a much higher dynamic range that avoids the masking of small reflection peaks by the large reflections typical of the input surface of an optical device.

InsideView™ can measure devices with a length of up to 600mm. A set of length matching delay modules is available to match the pigtail lengths of the devices to be measured and place the measurement span in the region of interest. With a reflection dynamic range of over 80 dB and a spatial resolution down to 10 μm, this instrument helps engineers and researchers see the inside of an optical device to precisely identify defects and their locations.



OCDR-1000

Preliminary Specifications

Operation Wavelengths	1310 nm , 1550 nm, Others available upon request
Return Loss Range	10 to 90 dB
Return Loss Accuracy ¹	±1.0 dB
Spatial Resolution ²	10 - 25 μm, depending on DUT dispersion
Spatial Accuracy ^{1,2}	< 0.1 mm (±0.01%)
Measurement Range ²	600 mm
Sweep Speed	20 mm/sec
Compatible Fibers	9/125 μm with connectors, others with fusion splices
Light Source:	
Peak Wavelength (s)	1310 nm ± 30 nm 1550 nm ± 30 nm
Spectral Width (-3 dB)	50 nm ± 10 nm
Average Power	> -3 dBm
Software	InsideView™ data analysis/display software
Operating Temperature	10 to 50 °C
Storage Temperature	-20 to 60 °C
Power Supply	100-240VAC, 50-60 Hz
Communications Interface	USB 2.0
Display	Notebook computer with USB connection
Connector Type	FC/APC standard or FC/PC
Dimensions	2U, ¼ 19" rack width 3.5" (H) x 14" (W) x 14" (D)

Notes

1. At 23±5°C.
2. Delay in air.

Ordering Information:

Instrument:

OCDR - 1000 - XX - XX

Wavelength:
13 = 1310 nm
15 = 1550 nm

Connectors:
FC/APC
FC/PC

Accessory Kit:

MKit - XX - XX

Connectors:
FC/APC
FC/PC

Fiber Lengths:

001: Set of 7 fiber-optic delay modules of lengths 1.2 to 3 meters, at 0.3m intervals.
Custom: Custom length fiber optic delay modules, to be specified by customer.

Applications:

- Optical Characterization of:
 - Photonic Integrated Circuits
 - Fiber Optic Components
- Accurate Measurement of:
 - Return Loss
 - Distributed Reflectivity

Unique Features:

- Dynamic Range: over 80 dB
- Scan range: 600 mm (400 mm in fiber)
- Spatial Resolution: down to 10 μm
- Compact & Lightweight
- Built-In Light Source
- Performs functions of discontinued Agilent 8504B Reflectometer- and More!



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NOTES:

The OCDR-1000 comes with one 1 meter fiber optic delay module with connector type matched to the OCDR.