OFM1020

Multimode Hi-Resolution Avionics OTDR

Features

- Real-Time Monitoring of Multimode Fiber Optic cables, components, and systems.
- Very high (millimeter) resolution for short-haul applications.
- Explosion proof Chassis and interface optimized for portability (Avionics Model).
- High-powered optical source combined with a photon counting detector provide excellent dynamic range of up to 90 dB.
- Test in both Rayleigh and Fresnel Modes.
- 850 nm Fixed Single Output Wavelength.
- High Definition Real Time Display.
- Intuitive On-Screen Menus.
- IEEE-488 Interface Port.

Included Equipment

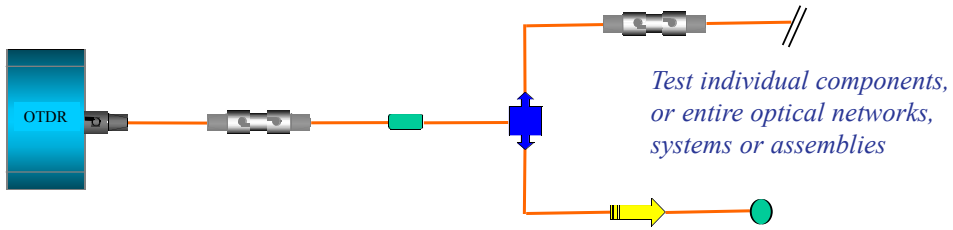
Hi-Resolution Optical Fiber Monitor

Precision Launch Cable

Accessories Pouch

Custom Metal Carrying Case

Reference Manual



Overview

Tempo OFM1020 products are Very High-Resolution Optical Time Domain Reflectometers (VHR-OTDR) for short-haul optical measurement applications.

The fiber monitor is an invaluable instrument for precisely measuring the optical characteristics of fiber cables, connectors, couplers, attenuators, splitters, switches, and harnesses, where millimeter resolution and high sensitivity are required.

The OFM1020 addresses the specific testing needs of customers where portability and ruggedness are a necessity, such as Avionics or Shipboard platforms.

OFM products differ in their abilities when compared to traditional long-haul OTDR instruments by providing the ability to measure Rayleigh backscatter and Fresnel reflection with virtually zero deadzone.

Analysis of short fiber spans or fiber optic components is made possible by the precision Picosecond Laser test pulse combined with high-speed photodetectors. Since the circuitry is optimized for measuring over small distances, the OFM series products are perfectly suited for those applications where a traditional long-haul OTDR is inappropriate.

The instrument interface features a real-time display, with intuitive on-screen menus and simple-to-use controls. Additionally, the instrument can be controlled remotely from a PC via GPIB connection.

Tempo OFM instruments are available in fixed standard or custom wavelengths. The optical output can be specified in a range of core diameters from 4 to 400 micrometers, allowing the instrument to be tailored to your exact testing needs.

Tempo
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Knowledge. Solutions. Success.

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Multimode Hi-Resolution Avionics OTDR

Ordering Information

Standard Models

OFM1020-85M05-CAL*
(850 nm Wavelength, 50 micron Core)
OFM1020-85M06-CAL*
(850 nm Wavelength, 62.5 micron Core)
OFM1020-85M10-CAL*
(850 nm Wavelength, 100 micron Core)
OFM1020-85M05
(850 nm Wavelength, 50 micron Core)
OFM1020-85M06
(850 nm Wavelength, 62.5 micron Core)
OFM1020-85M10
(850 nm Wavelength, 100 micron Core)

*CAL Models include provisions for field verification of Calibration and Performance.

Applications

The OFM1020 is specifically designed to determine the optical characteristics of fiber optic cabling and components employed as communications media in mobile platforms.

The OFM1020 is widely utilized in aerospace and military applications where mission-critical information regarding optical connectivity and system performance is required.

Currently, a model OFM1020 is ready for action on the U.S. Space Station.

System Specifications (Standard Models)*

Distance	
Range	0 to 460 Meters
Accuracy	+/- 2.5 cm
Single point Resolution	1 cm for SNR >50 dB
Two Point Resolution	13 cm for SNR >50 dB
Return Loss	
Dynamic Range	>90 dB
Accuracy	+/- 0.5 dB for RL <75 dB +/- 1.0 dB for RL >75 dB
Insertion Loss, Fresnel	
Dynamic Range	>40 dB
Accuracy	+/- 0.3 dB for SNR >50 dB
Insertion Loss, Rayleigh	
Dynamic Range	>20 dB
Accuracy	+/- 0.05 dB for SNR >50 dB
Size	36x46x20 cm (14x18x8 in.)
Approx. Weight	11 kg
Power	ac: 110 V, 60/400Hz dc: 28 V
Storage Temp.	-40° to +60°C
Operating Temp.	-20° to +45°C

*Specifications subject to change without notice.

Comprehensive hands-on training is available on request

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