OFM130 | Long Wavelength (1060-1635nm) Hi-Resolution OTDR

Tempo A Textron Company
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Product Description

Tempo OFM130 Optical Fiber Monitor is a 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, harnesses, amplifiers, DWDM components, where millimeter resolution and high sensitivity are required.

The OFM130 differs in cabilities 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 OFM130 is suited for those applications where a traditional long haul OTDR is inappropriate.

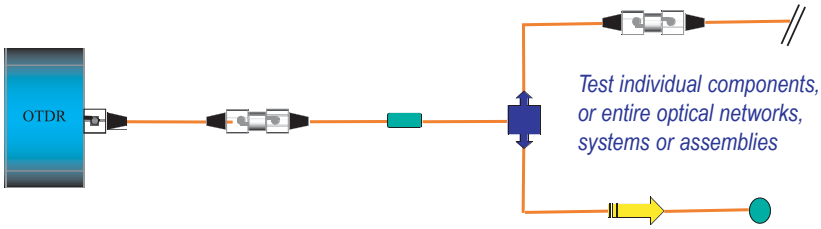
The instrument interface features a real-time display, with intuitive on-screen menus and simple-to-use controls. Additionally, the instrument can be controlled remotely from a PC via GPIB connection. Printouts are easily obtained with IEEE-488 output port through an external PC.

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.



FEATURES:

- Real-Time Monitoring of Fiber Optic cables, components, and systems
- Very high (millimeter) resolution for short-haul applications.
- Optimized for long wavelength operation in the 1300-1635 nm range in standard and custom wavelengths.
- High-powered optical source combined with a photon counting detector provide excellent dynamic range of up to 85 dB.
- Test in both Rayleigh and Fresnel Modes.
- Available for Single-mode and/or Multimode cable and components in a wide variety of fixed Single or Dual wavelengths.
- High Definition Real Time Display.
- Intuitive On-Screen Menus.
- GPIB Programmable.
- IEEE-488 Interface Port.



Included Equipment

- Hi-Resolution Optical Fiber Monitor
- Precision Launch Cable
- Custom Metal Carrying Case
- Reference Manual

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SPECIFICATIONS:*

(Standard Models)

Distance	
Range	0 to 20 km
Accuracy	0.01% or 3mm whichever is larger
Single point Resolution	5mm
Two Point Resolution	10 cm
Deadzone	
Fresnel Mode	0
Rayleigh Mode	10 cm after RL >50 dB, 100 cm for RL <50 dB
Return Loss	
Dynamic Range	>80 dB (85 dB for "T" Models)
Accuracy	+/- 0.5 dB for RL <75 dB,+/- 1.0dB for RL >75 dB
Insertion Loss, Fresnel	
Dynamic Range	>30 dB, T-Model >33 dB
Accuracy	+/- 0.3 dB for SNR >50 dB
Insertion Loss, Rayleigh	
Dynamic Range	>10 dB, T-Model >13 dB
Accuracy	+/- 0.02 dB for SNR >50 dB
Size	35 x 20 x 39 cm
Approx. Weight	9.5kg; shipping 18kg
Power	ac: 110/220 V
Storage temp.	-10° to 60° C
Operating temp.	0° to 40° C

*Specifications subject to change without notice

ORDERING INFORMATION

STANDARD MODELS

- **Single Wavelength 1300 nm**

OFM130-13S9 (1300 nm, 9 micron core)
OFM130-T13S9 (1300 nm, 9 micron core)*
OFM130-13M05 (1300 nm, 50 micron core)
OFM130-13M06 (1300 nm, 62.5 micron core)
OFM130-13M10 (1300 nm, 100 micron core)

- **Single Wavelength 1550 nm**

OFM130-15S9 (1550 nm, 9 micron core)
OFM130-T15S9 (1550 nm, 9 micron core)*
OFM130-15M05 (1550 nm, 50 micron core)
OFM130-15M06 (1550 nm, 62.5 micron core)
OFM130-15M10 (1550 nm, 100 micron core)

- Dual Wavelength 1300/1550 nm

OFM130-13/15S9 (1300/1550 nm, 9 micron core)
OFM130-T13/15S9 (1300/1550 nm, 9 micron core)*

- **Dual Wavelength, Dual Fiber (SM and MM)**

OFM130-13M06/15SM9 (1300 nm, MM-62.5 µm/1550nm, SM-9 µm)
OFM130-13M06/13SM9 (1300nm, MM-62.5µm / 1300nm, SM-9 µm)

*The OFM 130 Series operates in the 1060 to 1635 nanometer region. Optical outputs are available in fixed single or dual wavelengths. Standard fiber core diameters are 9 micron with custom core diameters available.

* The "T" models are constructed using circulators in place of the standard optical couplers. This results in an additional 5 dB Dynamic Range for Return Loss measurements, and an additional 3 dB Dynamic Range for Insertion Loss measurements over the standard specifications.

CUSTOM MODELS

In addition to the available Standard Models, OFM Systems can be configured with:

- Non-standard Wavelengths
- Non-standard Fiber Sizes
- Custom Connectors
- Multiple Output Ports
- Polarization Measurement Ports
- Optimized for Resolution
- Optimized for Sensitivity

Comprehensive hands-on training is available on request

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tel 1.800.642.2155 | tel 1.760.598.8900 | fax 1.760.598-5634 | www.tempo.textron.com