



*FSP-180 Handheld OTDR Testing a Cable*

## About the M200 Handheld OTDR

The Noyes M200 from AFL Telecommunications offers unmatched OTDR capabilities in a handheld package weighing less than 1kg (2lbs). Multimode, single mode and 'Quad' wavelength models are offered. With short dead zone and intermediate range specifications, the M200 is ideal for Tier 2 testing of premises (building and campus) networks or certification and troubleshooting of FTTX PON networks. Its bright, transfective display makes it suitable for both indoor and outdoor operation.

The M200 is based on a new hardware/software platform that supports automatic and manual setup, precision event analysis, dual-wavelength testing, fiber identification using Noyes 'TR' test receivers, rich file naming and folder setup, 6-hour battery life, internal and removable media data storage and USB connectivity. Test ports are equipped with tool-free adapters, which can be changed in seconds. A custom-designed polycarbonate case and shock-absorbing boot make it our most rugged OTDR ever.

Results are saved as industry standard .SOR files, which can be viewed, printed and analyzed on a PC using freeware available to you and your customers and can be downloaded at [www.afltele.com](http://www.afltele.com).

## Features

- Handheld, 0.9kg (2lbs)
- 850/1300/1310/1550nm
- 1.5m (typ.) event dead zone
- 22dB (MM), 26dB (SM) dynamic range
- Integrated VFL (650nm)
- Two switchable adapters included (ST/SC/FC)
- Transfective (indoor/outdoor) touchscreen display

## Applications

- Tier 2 testing of premises networks
- FTTX PON certification and troubleshooting
- Fast fault location
- Splice verification
- Network documentation



*M200 Handheld OTDR*

### Handheld OTDR Specifications

OTDR Specifications		
	Multimode	Single Mode
Emitter Type	Laser	
Safety Class	Class 1 FDA 21 CFR 1040.0 & 1040.11	
Center Wavelengths	850/1300nm	1310/1550nm
Wavelength Tolerance	±20/±30nm	±20/±30nm
Dynamic Range (SNR=1)	22dB	26dB
Event Dead Zone <sup>1</sup>	1.5m	1.5m
Attenuation Dead Zone <sup>2</sup>	9m	9m
Pulse Widths <sup>3</sup>	10, 30, 100, 300ns, 1, 3µs	10, 30, 100, 300ns, 1, 3, 10µs
Range	250m to 64km	250m to 208km
Data Points	Up to 16,000	up to 16,000
Data Point Spacing	0.25 m (range ≤ 4 km) Range/16,000 (range ≥ 8 km)	
Group Index of Refraction (GIR)	1.4000 to 1.6000	
Trace File Format	Bellcore GR-196 Version 1.1	
Trace File Storage Medium	Internal, non-volatile memory and removable compact flash card	
Trace File Storage Capacity	> 100 internal thousands on compact flash card	
Distance Uncertainty (m)	±(1 + 0.005% x distance + data point spacing)	
Visual Fault Locator Specifications		
Emitter Type	Laser	
Safety Class	Class II FDA 21 CFR 1040.10 & 1040.11 IEC 825-1:1993, EN60825-1:1994	
Wavelength	650nm	
Output Power (Nominal)	0.8mw	
General Specifications		
Size (In Boot)	23 x 11 x 7cm (8.8 x 4.3 x 2.8in)	
Weight	0.9kg (2lbs)	
Operating Temperature	-10 to +50°C	
Storage Temperature	-20 to +60°C	
Relative Humidity	0 to 95% RH (non-condensing)	
Power	Removable Lion battery or 110/220 VAC power adapter	
Battery Life	6 hours	

All specifications are subject to change.

1. Typical distance between the two points 1.5dB down each side of a reflective spike caused by a -40dB (Multimode) or -45dB (Single mode) event using 10ns pulse width.
2. Typical distance from event location to point where trace is within 0.5dB of backscatter.
3. 3µs pulse width not available at 850nm.



*FSP-180 Testing Unit*

## Ordering Information

Model Number	Description	Test Port Adapters
M200-K-QUAD	850/1300nm multimode and 1310/1550nm single mode OTDR	(2) ST, (2) SC and (1) FC
M200-K-MM	850/1300nm multimode OTDR	ST and SC
M200-K-SM	1310/1550nm single mode OTDR	SC and FC

All models include a rugged, soft-sided carry case with shoulder strap, 110/220 VAC power adapter with country-specific power cord and user guide.



## How to Order

For more information on how to order or to obtain a price quote on the AFSI FSPP-180-00-001, call toll free (U.S. only) at 800.472.4225, international calls please use 1.214.547.2400 or e-mail [sales@fibersystems.com](mailto:sales@fibersystems.com).

## About Amphenol Fiber Systems International

Amphenol Fiber Systems International (AFSI) designs, manufactures, markets and supports reliable and innovative fiber optic interconnect solutions that withstand the harsh environments of military, oil & gas, mining and broadcast applications. After more than a decade in business, AFSI continues to uphold its position as a global leader in fiber optic interconnect components and systems such as termini, M28876, MIL-ST, TFOCA and the TFOCA-II<sup>®</sup> connector, which AFSI developed and patented.

AFSI has delivered millions of fiber optic connectors in more than 22 countries. Whenever there is a need for superior, cost-effective fiber optic systems and products that will stand up to demanding operating environments, you can rely on AFSI for engineering know-how, top-quality products and expert technical support.

For more information about AFSI, visit [www.fibersystems.com](http://www.fibersystems.com).

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