

# Metro.OTDR-F7

*in Test we Trust*

**ALBEDO's Metro.OTDR-F7:** The industry's best solution for both Metro and Access OTDR with a 7-inch high-performance display for the installation and maintenance of optical infrastructures, PON and FTTx networks.

Our Basic or Extended Metro.OTDR-F7 can help you with new demanding network challenges, such as, testing and measuring physical KPI's like length, transmission, and joint loss. It can also detect and locate fiber optic faults or breakages. Ergonomics are prime and fine, making it ideal for everyday work in locating and troubleshooting the optical layer, with up to 14hr. operational mode with the new rechargeable and replaceable intelligent Li-ion battery.

## Features and Benefits:

- **Shortest dead zone (0.5~0.8m)** and 0.05m resolution makes it suitable for short optical fiber and pigtailed test.
- **FTTH/CATV/ WAN testing for 1x32, 1x64 and even 1/128 splitters** of PON networks to characterize all events from the ONT to the OLT.
- **Adaptable VFL** built-in 650nm / 2 mW allows to identify bad splice, bad connector, break or macro bend up to 5km.

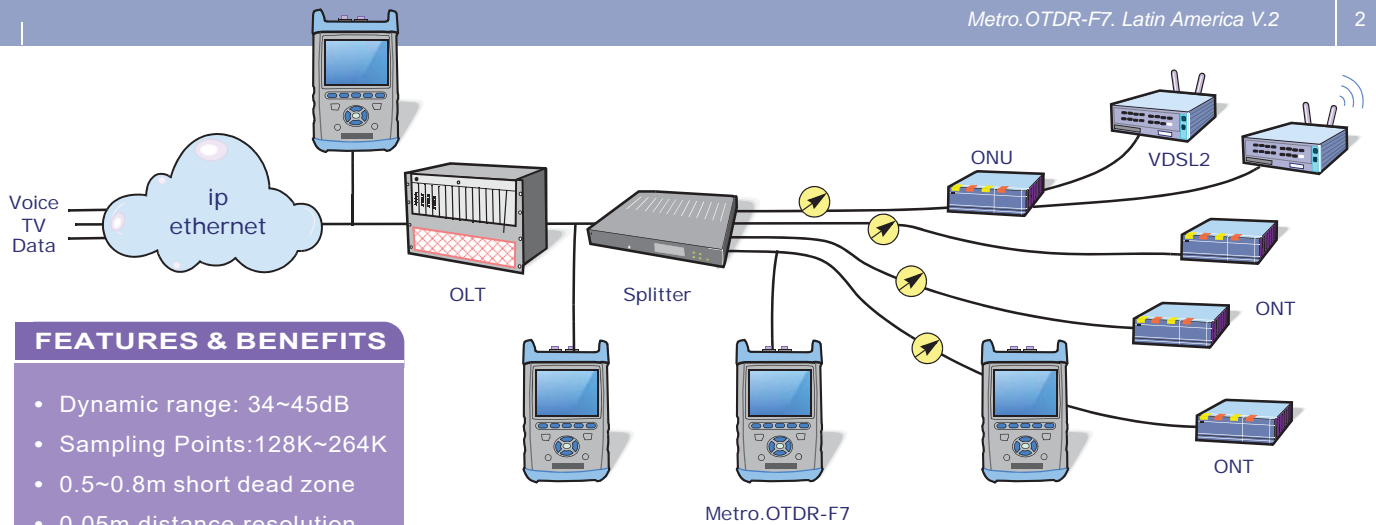
## "All-in-one OTDR, VFL, Power Meter and Light Source"

- **Light check**, when measuring a fiber there is a risk of damage the optical receiver. Metro.OTDR-F7 stops if light is present and a protection will be active instantly.
- **Multiple interface and accessories are** provided for the following functions: 4 x wave lengths simultaneously, Training via multimedia, Remote controlling, Direct printing of trace / event table
- **Fast analysis** to determine and locate the faults precisely and listing all events just pressing Start improving efficiency while not requiring high profile experts.

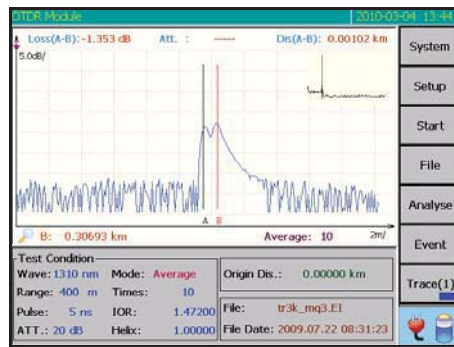
A reliable fiber plant is necessary for any application based on high speed and reliable transmission infrastructures. OTDRs are necessary to install, discover faults, measure the performance and create advanced reports. Most of the tests are tailored for each type of fiber and users may execute and save charts ready to be transferred for further analysis.

Our one-solution facilitates the identification and analysis of the anomalies found in the optical layer. As for Optical layer surveillance, Technicians can verify the quality of the optic installations by examining components such as cables, good and bad connections of FTTH/PON, for both Medium and Ultra long haul transmission.





- FEATURES & BENEFITS**
- Dynamic range: 34~45dB
  - Sampling Points:128K~264K
  - 0.5~0.8m short dead zone
  - 0.05m distance resolution
  - One-button test
  - Up to 4 wavelengths in 1 unit
  - Remote Control
  - Direct printer
  - GR196 & SR-4731 support
  - Up to 14h battery ext. mode
  - VFL & Optical Power Meter
  - Universal optic connector
  - Rugged OTDR in a solid case for daily and heavy use



**OTDR in Operation**

Metro.OTDR-F7 is a high-end Metro & Access solution widely used in engineering construction, maintenance test, optical fiber trouble-shooting, manufacturing and installation of optical fiber and cables.

**Manual mode:** for skilled users, with two options (a) *real-time* when dynamic changes are detected timely allowing to observe the effects of fibers that being spliced and connected, (b) *average* in this case noise can be suppressed and SNR is improved making the result more accurate. The more average is executed the more noise is suppressed however longer time is spent for processing. In practice, the average should be set prop-erly according to necessity.

**Auto mode:** measurement conditions are set automatically then low profile engineer and/or field-technician may use and know the fiber condi-tions very quickly.

**Dead-zone mode:** with the industry's best range (0.5~0.8m), this mode is suitable for testing optical fiber at short distances while the settings of range, pulse width and attenuator are programmed automat-ically. To get the best result, the terminal return loss should be guaranteed less than -40dB. □

Model	A	B	C	D
Fiber Type	Singlemode			
Wavelength (nm)	1310 / 1550		1310/1550/1625	
Dynamic Range (dB)	37 / 35	42 / 40	45 / 43	39 / 36 / 34
Event death zone (m)	0.5~0.8m (range≤1.6km, pulse 5ns, fiber reflection loss≥ 40dB)			
Attn. death zone (m)	2.5~10m (range≤ 1.6km, pulse 5ns, fiber reflection loss≥50dB)			

Metro.OTDR-F7 specs (Region: Latin America)	
Distance Accuracy	±(0.75m + sampling space + distance × 0.0025%)
Distance Resolution	0.05, 0.1, 0.2, 0.5, 1, 2, 4, 8, 16, 32m
Distance Range	0.4, 0.8, 1.6, 3.2, 6.4, 16, 32, 64, 128, 256, 512km
Pulse Width	5, 10, 30, 80, 160, 320, 640, 1280, 5120, 10240, 20480ns
Loss Threshold	0.01dB
Sampling Points	Basic Unit from 128k to Extended Unit* with 264K points
Linearity	0.03dB/dB
Loss Resolution	0.001dB
Storage Capacity	≥ 800 traces (internal) or ≥ 65500 traces (2GB SD card)*
Group Refractive	1.00000 to 2.00000 (0.00001 steps)
Visual Fault Locator*	650nm ±10nm, 2mW Class-2, Output Power -1.5dBm. For 62.5/125µm. CW/1Hz
Optical Power Meter*	Wavelength range: 850nm to 1650nm, Calibrated Wavelengths*: 850,1300,1310,1490,1550,1625 & 1650nm. Measurement range:-60~0dBm. Measurement accuracy: ± 5 % ± 10 nW.
Optical Connector	FC/UPC, SC/APC (options: SC/UPC, LC/UPC, ST/UPC)*
Power Supply	100-240VAC 50-60Hz, AC/DC. Lithium battery ≥ 14h Extended Mode*)
Ergonomics	Display: 170mm TFT-LCD Touch 640×480pixels. Size: 295×186×75mm, Weight: 1.5kg / 2.5kg with extended / extra battery. Ports: USB2.0, Mini USB/USB2.0, Ethernet, Earphone, SD-card Reader

\*Optional: Please contact us for availability . Latin America Requests: [pca@albedotelecom.com](mailto:pca@albedotelecom.com)