



AT.OTDR (optical testing)

in Test we Trust

This new and compact instrument speeds up the installation and maintenance of the fiber optic plant by means of a complete set of tools and measurements. This rugged, light and compact OTDR has been designed for field engineers rolling out long haul, metropolitan or access networks that are willing to certify the performance of optic links and have to troubleshoot the physical layer.

A reliable fiber plant is necessary for critical and non-critical applications therefore good tools are necessary to discover faults, measure the performance and create reports to compare results with the international standards. This is the way to get a broad view of the whole installation.

All you need for testing

We are ready to satisfy market needs with this collection of five solutions (5) for smart optical analysis. Each model has an Optical Reflectometer (OTDR), which is the common base, that can be complemented with an Optical Power Meter (OPW), a Light Source (LS), and a Visual Fault Locator (VFL).

Engineers will troubleshoot faults running manual or automated tests. Field operation may last for many hours thanks to the autonomy supplied by the Li-On batteries. Most of the tests are tailored for each type of fiber and users may execute and save up to 1000 curves ready to be transferred

to mobile phones, tablets or computers for further analysis. Measurements also include attenuation, total attenuation at specific distances, distance to the fault and length of the fiber under test. All together will facilitate the identification and analysis of the anomalies found in the optical layer.

“All-in-one OTDR, VFL, Power Meter and Light Source”

Optical layer surveillance

Once the testing unit is connected there is an evaluation of the quality of the fiber classified as GOOD, Moderate or Poor depending how clean, dirty or even damaged fibers are. Advanced analysis includes the typical OTDR signal as a graphic signature well presented in a good resolution that will characterize fiber performance.

Technicians can now verify the quality of the optic installations by examining components such as cables, good and bad connections of FTTH/PON, Medium and Ultra long haul fiber plants.



M O D E L S					
Feature	Z-101	Z-102	Z-103	Z-104	Z-105
Fiber Type	Monomode				
Wave Length	1310 nm or 1550 nm	1310 / 1550 nm			1310 / 1550 / 1625nm
Dynamic Range	34 dB or 31 dB	31dB / 29dB	34 / 31 dB	36 / 33 dB	31 / 29 / 29 dB
Selectable Distance Range	up to 240 km				
Measuring Modes	Automatic, real-time and average up to 3 minutes				
Event Dead Zone	2.0 m				
Attenuation Dead Zone	15.0 m				
Pulse Length	from 10 ns to 20 μ s				
Connectors	FC / SC				
Archives of the Curves	Telcordia SR-4731 (.sor)				
Storage Capacity	up to 1000 curves				
Connectivity	USB to transfer curves for viewing on PC and software update				
Optical Power Meter (OPM) ⁱ	from -55 dBm to +5 dBm at 1550 nm				
Light Source (LS) ⁱⁱ	1310nm or 1550nm	1310 nm and 1550 nm at 0 dBm			
Visual Fault Locator (VFL) ⁱⁱⁱ	650 nm at 20 mW				OPM or VFL
Ergonomics	<ul style="list-style-type: none"> • Dimensions: 225 mm x 110 mm x 45 mm • Weight: 680 gr • Screen: TFT color 3.8 inch, 240 x 320 pixels • Operating temperature: -5 to 50 degrees Celsius • Keyboard: 23 keys • Rechargeable Li-On 7.4 V x 2.2 Ah • AC / DC: Universal Charger 90 ~ 200 V, 10 V / 1.2 A 				

i. **Optical Power Meter (OPM):** This module is fast and efficient. It measures the optical power and presents the result in dBm or in mW.

ii. **Light Source (LS):** The OTDR is used to generate a continuous wave to a dark fiber while at the far end an Optical Power Meter measures the attenuation.

iii. **Visual Fault Locator (VFL):** this module can find a fault by means of the generation of visible light.

