# **Telecommunications**







## « OTDR » reflectometer

The OTDR « Optical Time Domain Reflectometer » EFO300000 enables the characterization of an optical fiber. Based on the reflection of the signal, all events on the fiber are analyzed (connections, unions, welding, splitting, etc.), which make this analyzer essential for any kind of maintenance or troubleshooting work.

The technician can identify defaults at any point of the optical fiber and accurately spot the issue. It a compact, light and easy-to-use device. Its colour LCD screen enables to view in a clear way every information, with or without ambient light. Up to 1000 measurements can be saved within its internal memory and it is possible to transfer them to the PC thanks to its USB interface.

#### **Educational purpose**

- Put the student in a professional context.
- Determine the defaults and the causes for quality and flow losses in optical networks.
- Qualify an optical fiber transmission line.

#### **Studied topics**

- · Characterization of an optical fiber, measurement of signal reflection.
- Analysis of all events on the fiber (connections, welding, stresses, etc.).

#### **Targeted training**

▶ Vocational training in electricity/electronics, digital telecommunications

## **Technical characteristics:**



<b>Specifications:</b>	« OTDR » reflectometer
Wavelength (±20 nm)	1310/1550 nm
Dynamic range	24 dB
Event dead zone	10
Attenuation dead zone	25
Connector type (interchangeable SC, ST, FC)	SC / APC
Fiber type	Single mode
Configurable pulse-width	5 nS / 10 nS / 12 nS / 30 nS / 100 nS / 275 nS / 300 nS /1 μS / 2.5 μS / 10 μS / 20 μS
Configurable scope	0,3 / 1,3 / 2,5 / 5 / 10 / 20 / 40 / 80 / 120 / 160 / 240 km
Measurement accuracy for the longitude	+/- (1 m + 5 x 10-5 x Distance + reference range)
Detection accuracy for the reflection	+/- 4 dB
Detection accuracy for the attenuation	+/- 0,05 dB / dB
Measurements	300 test curves
Power supply	Rechargeable batteries NiMH (8 h. processing, 20 h. stand by) / AC adaptor
External port	RS-232 / USB

### **Standard configuration:**

EFO 300 B – Basic package «OTDR» reflectometry upon Optical Fiber including:		
Reference	Designation	Qty
EFO300000	Reflectometer (OTDR) Prolite 50, 1300 et 1550 nm, dynamic: 24 dB	1
EFO301000	150-m embedded launch fiber (with SC/PC connector)	1
EFO302000	Set of experimentation components	1

#### Indispensable accessory:

EFO002000: laser protection glasses, OD value > 4 on the range 1000/1600 nm

**Packing:** 

Dimensions: Gross P: 220 x 1:110 x H: 70mm

Weight: Gross 1 Kg

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