Plug and Play OTDR

OTDR-30A/SM, OTDR-30B/MM



CTC Union's OTDR-30A/SM, OTDR-30B/MM (Optical Time Domain Reflectometer) is an optical fault locator and analysis tool for optical fiber networks. The OTDR features a light, compact, hand-held design with an intelligent user interface that is easy and quick to use. The color LCD display and backlight design makes testing work more comfortable and convenient, whether during daylight or at night.

As a fault locating and analyzing tool, CTC Union's OTDR is much more economical than traditional OTDRs. In addition to its 300 plus internal curve storage, the OTDR-30A/30B can save and transfer the measurement curves data to a PC via serial or USB port for further analysis with Window(r) based "Trace Manager" software. When set in auto measurement mode, the user can active the measurement operations easily by the push of only one button. The OTDR-30A/30B will become an indispensable tool that all network builders, and maintenance personnel of optic fiber networks should have in their tool kit. With portability in mind, the OTDR-30A/30B is ideal for optical fiber installation, maintenance, field construction, and other on-site fault-location analysis.

Applications

- Splicing loss detection
- Fiber attenuation measurement
- Acceptance testing
- Fiber break locating
- Fiber length measurement
- Fiber identification

Features

- Lightweight, portable and economical
- Easy to use, no tedious learning process
- Fast test & color LCD displays all measurement information
- Backlight supports testing work at low light condiftions
- Large memory capacity (300 test curves)
- RS-232/USB data upload ports
- Trace Manager PC software for previously stored data analysis and reporting
- Dust, damp and shock resistant design for field application
- LCD indicators for battery charge and LD lasing status
- Built-in NiMH rechargeable battery supports 5 hours continuous operation
- Auto off function conserves battery energy
- Low battery Indicator
- Dual wavelength capability

Specifications

Optical Specifications	OTDR -30A/SM	OTDR -30B/MM	
Dynamic Range(dB) (1)	24/24	18/22	
Wavelength(±20nm)	1310/1550	850/1300	
Fiber Type	Single -mode	Multi -mode	
Optical Connection	Single Port		
Emitter Type	LD		
Connector Type	FC/PC (interchangeable SC,ST)		
Selectable Ranges(km)	1.3, 2.5, 5, 10, 20, 40, 80, 120	0.1, 0.3, 0.5, 1.3, 2.5, 5, 10@850nm;	0.1, 0.3, 0.5, 1.3, 2.5, 5, 10, 20, 40, 80@1300nm
Pulse Widths(ns)	12, 30, 100, 275, 1000, 2500, 1000, 2000	12, 30, 100, 275, 1000@850nm;	30, 100, 275, 1000, 2500@1300nm
Event Deadzone (2)	10m	7m	
Attenuation Deadzone (2)	25m	20m	
Average Time	15s/30s/1min/2min/3min		
Distance Measure Accuracy	± (1 m + 5 × 10^{-5} ×Distance + Sampling Space)		
Reflection Detect Accuracy	± 4 dB		
Attenuation Detect Accuracy	±0.05 dB/dB		
Measurement Data Storage	300 Test Curves		
Data Transmission	RS-232/USB port		

Note:

(1)The dynamic range is measured at maximum pulse width within average time of 3 minutes;

(2)Conditions for blind Measurement: Reflection events are within a range of 4km; reflection intensity is less than -35dB; and the blind zone is measured at the minimum pulse width.

(3)Conditions for blind Measurement: Reflection events are within a range of 1km; reflection intensity is less than -32dB; and the blind zone is measured at the minimum pulse width.

Ordering Information

- ***OTDR-30A/SM***
  OTDR, dual wavelength, single mode Instrument (including rechargeable battery)
- ***OTDR-30B/MM***
  OTDR, dual wavelength, multi-mode Instrument (including rechargeable battery)

General Specifications

Physical

- Dimensions: 7.7 x 3.9 x 2.4 inch (196 x 100 x 60mm)
- Weight: 870 gm

General

- Operating Temperature: -10°C~ 50°C
- Storage Temperature: -20°C~ 70°C
- Relative Humidity: 0 to 95%(non-condensing)

Power Supply

- NiMH chargeable battery(1600mA/h) /AC adapter, auto recharging
- Battery Life: Support at least 5 hrs continuous operation on one charge, at least 20 hrs on stand-by