

OTDR Datasheet

OTDR100x

*Where x represents different model



OTDR100x series Optical Time Domain Reflectometer (OTDR) is an intelligent meter of a new generation for the detection of fiber communication systems. With the popularization of optical network construction in cities and countryside, the measurement of optical network becomes short and disperse; it is specially designed for that kind of application.

Features

- ◆ Handy, lightweight, smart and tablet-inspired design
- ◆ Rugged design built for outside plant
- ◆ IP65 protection level, outdoor enhanced
- ◆ Dynamic range up to 45 dB for up to 240 km point-to-point (P2P)

Product Annotation

- | | | |
|------------------|--------------------------------|---------------------------------------|
| 1- Stand support | 2- USB ports and Ethernet port | 3- OTDR port and other optional ports |
| 4- Screen | 5- Panel | |



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Specifications

Type	Testing Wavelength (MM: ±20nm, SM: ±10nm)	Dynamic Range (dB)	Event Dead-zone (m)	Attenuation Dead-zone (m)
OTDR1001	1310/1550	32/30	1	8/8
OTDR1002	1310/1550	37/35	1	8/8
OTDR1003	1310/1550	42/40	0.8	8/8
OTDR1004	1310/1550	45/42	0.8	8/8
OTDR1005	1310/1490/1550	30/28/28	1.5	8/8/8
OTDR1006	1310/1550/1625	30/28/28	1.5	8/8/8
OTDR1007	1310/1490/1550	37/36/36	0.8	8/8/8
OTDR1008	1310/1550/1625	37/36/36	0.8	8/8/8

Technical Specifications

Display	7-in TFT-LCD with LED backlight (touch screen function is optional)
Interface	1×RJ45 port, 3×USB port (USB 2.0, Type A USB×2, Type B USB×1)
Storage	Internal memory: 4GB (about 40,000 groups of curves)
Battery	7.4V(dc)/4.4Ah lithium battery (with air traffic certification) Operating time: 12 hours, Telcordia GR-196-CORE
Power Supply	10V(dc), 100V(ac) to 240V(ac), 50~60Hz
Pulse Width (ns)	Single mode: 5 to 20,000
Distance Range (km)	Single mode: 0.1 to 240
Sampling Resolution (cm)	5 Min.
Sampling Point	Up to 128,000
Linearity (dB/dB)	≤0.05
Distance Resolution (m)	0.01
Reflectance Accuracy (dB)	Single mode: ±2, multi-mode: ±4
Real-time Refresh (Hz)	1
Distance Accuracy	±(1m+measuring distance×3×10 ⁻⁵ +sampling resolution) (excluding IOR uncertainty)
IOR Setting	1.4000~1.7000, 0.0001 step
Scale Indication	X axis: 4m~70m/div, Y axis: Minimum 0.09dB/div
Fiber Event Analysis	-Reflective and non-reflective events: 0.01 to 1.99dB (0.01dB steps) -Reflective: 0.01 to 32dB (0.01dB steps) -Fiber end/break: 3 to 20dB (1dB steps)
Other Functions	Live Fiber detect: Verifies presence communication light in optical fiber Trace overlay and comparison



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VFL Module (Standard)

Output Power (mW)	10, CLASSIII B
Wavelength (nm)	650
Launching Mode	CW/2Hz
Optical Connector	FC/UPC

Power Meter Module (Optional)

Wavelength Range (± 20 nm)	800~1700
Calibrated Wavelength (nm)	850/1300/1310/1490/1550/1625/1650
Test Range (dBm)	Type A: -65~+5 (standard) Type B: -40~+23 (optional)
Resolution (dB)	0.01
Accuracy (dB)	$\pm 0.35 \pm 1$ nW
Modulation Identification	270/1k/2kHz, Pin _{input} ≥ -40 dBm
Connector	FC/UPC

Light Source Module (Optional)

Working Wavelength (± 20 nm)	1310/1550/1625
Output Power (dBm)	Adjustable -25~0
Accuracy (dB)	± 0.5
Connector	FC/UPC

Fiber Microscope Module (Optional)

Magnification	400X
Resolution (μ m)	1.0
View of Field (mm)	0.40 \times 0.31
Storage/working Condition ($^{\circ}$ C)	-18~35
Dimension (mm)	235 \times 95 \times 30
Weight (g)	150
Sensor	1/3 inch 2 million of pixel
USB	1.1/2.0
Adapter	SC-PC-F (For SC/PC adapter) FC-PC-F (For FC/PC adapter) LC-PC-F (For LC/PC adapter) 2.5PC-M (For 2.5mm connector, SC/PC, FC/PC, ST/PC)

