

AE1001 Portable OTDR

Key Benefits

- Ultra-portable, lightweight OTDR for FTtx networks
- 4.3" LCD touchscreen is visible in high- or low-light conditions
- Fast dual-wavelength test generates results in ≤5 seconds
- Excellent stability and repeatability
- Power-packed ~2-lb meter runs continuously for over 4 hours
- Save >160k OTDR traces with 16 GB of data storage

Overview

The last thing a fiber maintenance technician needs is a double armful of bulky, feature-bloated equipment to bog down the job. The new AE1001 from Deviser Instruments is a sleek, zero-fuss OTDR weighing less than 1 kg that tests the common 1310 & 1550nm wavelengths in 5s flat. Low power consumption and a solid 2500mAh battery allow the AE1001 to run automated, manual, or real-time tests continuously for over 4 hours, and are supplemented with the always-handly OPM and VFL.

Optical Parameters		
Test Wavelength	1310nm ± 20nm	1550nm ± 20nm
Dynamic range*	26 dB	24 dB
Event deadzone**	≤ 3m	
Attenuation deadzone**	≤ 10m	
Measurement range	150m, 300m, 500m, 1km, 2km, 5km, 10km, 20km, 40km, 80km	
Pulse width	3ns, 5ns, 10 ns, 30 ns, 50 ns, 100 ns, 200 ns, 500 ns, 1µs, 2µs, 5µs, 10µs, 20µs	
Sampling resolution	Auto / high-resolution modes	
Sampling points	Up to 12,800	
Group refractive index***	1.000000 ~ 2.000000	
Distance uncertainty	± (0.75 + 0.005% × fiber length + sample resolution)	
Linearity	0.05 dB/dB	
Loss threshold	0.001 dB	
Loss resolution	0.001 dB	
Refresh rate	10 fields/s	
Reflectance accuracy	±3 dB	
Measurement time range	5s ~ 5min, real time	
Data storage	16 GB, up to 160,000 OTDR traces	

* At 25°C ± 5°C, 20µs pulse width, 3min average time, starting backscatter value SNR = 1.

** At 25°C ± 5°C, 5ns pulse width, non-saturated reflective event, 5cm distance accuracy.

*** Without group refractive index uncertainty of fiber.



Other Test Modes

Optical Power Meter	Calibrated λ	1310, 1550nm
	Operating λ	850, 980, 1300, 1310, 1490, 1550, 1610, 1625, 1650nm
	Power range	Select from [-70 ~ +10 dBm] or [-50 ~ +26 dBm]
	Power accuracy	±0.23 dB
Visual Fault Locator (VFL)	Wavelength	650 ± 10nm
	Power	1mW
	Compliance	Laser Safety Class II
Optical port type		PC (default); APC (optional)
Optical adapter type		FC (default); SC, ST, LC, SC/APC (optional)

General Specifications

Display		4.3" dot matrix TFT LCD touchscreen
Interface		1x USB 2.0; 1x RJ45 LAN (10M/100M/1000M, optional)
Power	Supply	100 ~ 240V, 1.5A, 50~60Hz (AC); max 12V / 2Ah (DC); total max power 24 W
	Consumption	< 3 W
Battery		7.4V / 2500 mAh Li-ion battery, 18.5 Wh
Operating Time		~ 6 hrs on full charge (4 hrs continuous testing)
Operating Temperature		-10°C ~ +50°C
Storage Temperature		-40°C ~ +70°C
Relative Humidity		0 ~ 95%, non-condensing
Dimensions (LxWxH)		7.1" x 5.7" x 2.2" (180mm x 145mm x 55mm)
Weight		< 2.2 lbs (< 1 kg)

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