



Product Name	GAOTek E1 Time Domain Tester
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GAOTek E1 Time Domain Tester



1. Introduction

Series optical time domain reflectometer is a new generation of portable and intelligent measuring instrument for testing optical fiber communication systems. Adopt a 5.6-inch color touch screen, button/touch dual operation; Internal integration of eight major functional modules, multi-functional integration to help customers effectively solve the field test and maintenance; The highest 45 dB dynamic range, can penetrate optical splitter, effective PON network testing; Intelligent power-saving management, 20 hours long standby, efficient protection of test dimension continuous.



2. Applications:

- It is mainly used to measure the length, loss, and connection quality of all kinds of optical fibers and cables, and can be widely used in engineering construction, line maintenance and testing, emergency repair, and the development and production of optical fibers and cables.
- The design concept of multifunctional integration, precision testing, and convenient operation makes the field test operation simple.

3. Product Features

1. High Performance Test

- 5.6-inch color TFT LCD, touch / key dual operation
- Dynamic range: 35/33dB, maximum to 45dB
- Less than 0.8 meters ultra short event blind area testing optical fiber jumper freely
- Link optical nondestructive testing
- Signal optical detection function (Effective protection of APD)

2. Multifunctional Test - Standard Configuration

- OTDR
- Stable laser source
- Visual red light fault location (VFL)
- Optical power meter (OPM)
- Multifunctional Test - High Configuration
- Intelligent Optical Link Mapper [iOLM]
- Optical fiber end face detection
- Optica Uoss test
- Fault location



3. Convenient operation

- One key automatic test
- Unique diagnostic function for test results
- Multi-wavelength simultaneous testing function
- Ethernet Remote control function

4. Convenient data processing

- English input function
- Automatic data storage
- SOR batch processing
- Remote upgrade function

5. High reliability

- 20h super long standby
- 1.5meter drop test
- Waterproof and splashproof
- Operating temperature -10°C~50°C



4. Technical Specifications

OTDR									
Model	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Type	SM							MM	SM/MM
Wavelength	1310nm/1550nm				1310nm /1490nm /1550nm	1310nm /1550nm /1625nm	1310nm /1490nm /1550nm /1625nm	850nm /1300nm	850nm /1310nm /1550nm
Max Dynamic Range	35/3 3dB	38/36 dB	42/40d B	45/43d B	37/35/ 35dB	37/35/3 5dB	37/35/35 /35dB	28/26d B	26/28/35/ 33dB
Event Blind Zone	1m	0.8m	0.8m	0.8m	0.8m	0.8m	0.8m	1m	1m
ATT Blind zone	6m	6m	6m	6m	6m	6m	6m	6m	6m
Test Range	500m/1 km/2km/4km/8km/16km/ 32km/64km/12 8km/256km								
Pulse Width	3ns/5ns/10ns/30ns/50ns/80ns/160ns/320ns/500ns/800ns/1000ns/3000ns/5000ns/8000ns/10000ns/20000ns								
Loss accuracy	±0.05dB/dB								
Sample Points	16k~256k								
Sample Resolution	0.05m~16m								
Reflection	±3dB								

Based in New York City & Toronto, GAO Tek Inc. is ranked as one of the top 10 global B2B technology suppliers. GAO ships overnight within the U.S. & Canada & provides top-notch support thanks to its 4 decades of experience.



Accuracy	
File Format	SOR Standard File Format
Loss Analysis	4-point method /5-point method
Laser Safety Level	Class II
Refresh Rate	3Hz(Typ.)
Data Storage	Internal storage: 100M (<3000 curves); External storage: 4G bit
Connector	FC/UPC (Interchangeable SC、ST)
Data Interface	USB、Mini-USB、10M/100M Ethernet Port
OPM	
Wavelength range	800nm~1700nm
Connector	Universal joint FC/SC/ST
Test Scope	-50dBm~+26dBm
Uncertainty	±5%
Calibration Wavelength	850nm/980nm/1300nm/1310nm/1490nm/1550nm/1625nm/1650nm
LS	
Laser Type	FP-LD
Wavelength	Consistent with OTDR output wavelength
Output Power	>-5dBm



Stability	CW, $\pm 0.5\text{dB}/15\text{min}$ (Test after 15 minutes of preheating)
Connector	FC/UPC (Interchangeable SC、ST)
VFL	
Wavelength	650nm \pm 20nm
Output power	>2mW
Mode	CW/1Hz/2Hz
Connector	FC/UPC (Interchangeable SC> ST)
The Optical Loss Test index refers to the above LS and OPM index.	
Others	
Display	5.6 inch color LCD + touch screen
Power Supply	AC/DC Adapter: Input: 100V~240V, 50/60Hz, 0.6A Output: 12V-19V, 1.5A Li-Battery: 7.4V, 5200mAh
Working Temperature	-10°C ~+50°C
Storage Temperature	-40°C ~+70°C
Relative Humidity	0 ~95 %, Non Condensing
Weight	$\leq 1.2\text{kg}$
Size	227mmx 160mmx70min
Functions of Host: PON OTDR/OPM/VFL/LS/ Event Map/Fiber End Detection (Additional purchase detector)/Optical Loss Test	



NOTE:

Test temperature is 25°C±2°C, and the maximum pulse width; and average time are more than 30s.

Test conditions of the Event Blind Zone are minimum range, minimum pulse width, reflection loss of optical fiber end surface (> 45dB),and typical value.

5. Configuration list

NO.	Name	Quantity	Remarks
1	Host	1	Battery included
2	AC/DC adapter	1	
3	U disk(including analysis software/User's manual	1	
4	Touch pen	1	
5	Data line	1	
6	OTDR SC adapter	1	
7	OPM SC adapter	1	
8	Fast operating manual	1	
9	Instruction manual	1	
10	Calibration certification	1	
11	Certificate/warranty card	1	
12	Clean cotton piece	10	
13	Leather knob	1	
14	Special backpack for instrument	1	

6. Pictures



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