



MAXWELLON TF2102

42dB/250km

High Performance PON OTDR

2024

TF2102 PON OTDR offers a seamless user experience with integrated touch screen and keys. It excels in short-range measurement with a dead zone of 1/5m for single mode and 2.5/8m for multi-mode. With a maximum sampling resolution of 5cm, it supports comprehensive analysis functions such as segment return loss, event point return loss, multi-curves comparison, and quick screen-shots. Additionally, it features a complete user data interface, including USB (Type A), MINI USB, and SD card slots.

■ Key Feature

■ 5.6 Inch LCD

TFT Resistive Touch Screen: 640X480

■ 7 Functional Modules

OTDR, OPM, VFL, LS, Loss Testing, Event map, Fiber Inspection

■ 42dB/250km

42dB Dynamic Range, Maximum Test Range :250km

■ 5 Wavelength

Up To 5 Wavelengths

■ 1m/5m

Dead zone: 1m/5m

Convenient Man-machine Interface

5.6-inch color TFT LCD

Touch screen and keys

Multiple languages available

Friendly and convenient operation menu

Multifunctional Test Platform

- OTDR
- OPM
- VFL
- Event Map
- Fiber Inspection
- Loss Testing
- Laser Source

Convenient Data Processing

English and Chinese input function

Automatic data storage

Automatic analysis of test results

USB disk, USB cable and SD card export data

Any interface can be screenshot and stored

High Reliability

Dual battery 20 hour long standby

Waterproof and splash proof

Automatic light detection and protection

Operating temperature: -10°C~+50°C

Storage temperature: -40°C~+80°C

Charge temperature: 0°C~+45°C



■ Specification

Model	Single Mode	Multi Mode
Wavelength(max:5λ)	1310/1490/1550/1610/1625/1650nm(Optional)	850/1300nm
Dynamic Range	26~42dB	22/26dB
Dead Zone	1/5m	2.5/8m
Pulse Width	3ns/5ns/10ns/20ns/50ns/100ns/200ns/500ns/1us/ 2us/5us/10us/20us	5ns/10ns/20ns/50ns/100ns/200ns/500ns/1us/2us
Range	100m/200m/500m/2km/5km/10km/20km/40km/80km/120km/250km	
Minimum sampling resolution	5cm	
linearity	≤0.05dB/dB	
Loss resolution(Unit: dB)	0.001dB	
Distance resolution(Unit: m)	0.01m	
Distance accuracy	±(1m+Range×0.05%+Sampling resolution) (Regardless of the refractive index)	
Data memory	16G SD card(>100000 data)	
Interface	USB(Type A×1,Type B×1), Micro SD card	
Battery	Single battery capacity:7.4V/2500mAh X2(Two batteries)	
Temperature/Humidity	Environment temperature(-10℃ ~+50℃);Storage temperature:-20℃ ~+70℃ , ≤95%(No condensation)	
Size/wight	215×155×68mm / 1.1kg(including two batteries), Package Weight: 3kg/set	

Other Modules

Module	Parameter	Note
VFL	10/20/30/50mW	Standard configuration:10mW
OPM	A: +10~-+70dBm; C: +26~-50dBm	Standard configuration:A
Laser source	Output power:-5dBm±2dB;Frequency:270/1k/2k Hz	Only single mode
Event map		Standard configuration
Loss testing	OPM+LS	Standard configuration
Fiber Inspection	Can be externally connected to a 400x USB end face detector	Optional

■ Ordering Information

Wavelength Options (Up to 5 Choices):

Single-mode: 1310nm, 1490nm, 1550nm, 1610nm, 1625nm, 1650nm

Multi-mode: 850nm, 1300nm

Dynamic Range:

Single-mode: 26~42dB

Multi-mode: 22dB / 26dB



OTDR
TF2102



USB cable
USB-02



Portable package
PKG



straps
STP



Power Card
ADC-18



Maxwellon Electronic Instruments Co.,LTD.

Factory: No.6 Xiangjiang Road, Qingdao 266000, China
Tel: 0086 13816527810

Sales Office: NO.153 Zhuzhou Rd.,Laoshan District, Qingdao 266100, China.
Tel: 0086-532-80977508
Fax: 0086-532-80977508

Sales: Sales@Maxwellon.com
Web: www.maxwellon.com