



## TFN F4 Series Optical Time Domain Reflectometer (OTDR)



### Product Overview

The TFN F4 Series is a fiber optic test instrument designed for demanding installation and maintenance troubleshooting scenarios. It integrates multiple functions, including an OTDR, optical power meter, and visual fault location. Equipped with a large color LCD, the device offers intuitive operation and remote control, making it suitable for a variety of field applications, including fiber installation, maintenance, and fault location.

### Core Selling Points (Solving Customer Pain Points)

#### 1. Professional, Durable, and Stable

Designed specifically for high-intensity installation and maintenance sites, the rugged chassis adapts to complex working environments.

High functional integration allows for multiple uses in one device, reducing the number of external devices and improving work efficiency.

#### 2. Large Display, Intuitive Operation

Equipped with an 8-inch color LCD, the display is clear and smooth, and the graphical user interface is more user-friendly.

Supporting touchscreen operation makes it easier to set parameters such as range, pulse width, and measurement time.

#### 3. Multiple test modes to flexibly meet field needs

The OTDR supports three measurement modes: automatic, averaging, and real-time, meeting diverse test scenarios. The real-time testing function monitors splice loss and return loss in real time during fiber installation.

#### 4. App-Based Bluetooth Remote Control

The mobile app connects to the device via Bluetooth for remote operation of OTDR, OPM, VFL, and other functions.

This facilitates single-person operation or remote collaboration, enhancing testing flexibility.

#### 5. Multi-Function Integration, Comprehensive Coverage for Testing Needs

Integrated functions include an optical power meter, visual fault locator, and Ethernet testing, providing comprehensive support for fiber link testing and diagnostics.



### Product Parameters

Items	Specifications
Display	8-inch color LCD + touchscreen
Wavelength Support	1310/1550nm (single-mode), 850/1300/1310/1550nm (single-mode and multi-mode)
Dynamic Range	35/33dB (F4), 42/40dB (F4-V1), 45/43dB (F4-V2), 26/30/37/35dB (F4-SMV)
Measurement Mode	Auto, average, real-time
Maximum Range	200 km (F4-V2)
Interface Type	OTDR, OPM, VFL, USB, Ethernet, power supply, etc.
Bluetooth Support	Yes (app remote control)
Operating Temperature	-10 ° C to 50 ° C
Weight	1.7kg

### Main Functions

#### Optical Time Domain Reflectometer (OTDR)

- Supports dual-wavelength testing (e.g., 1310/1550nm)
- Three measurement modes: automatic, average, and real-time
- Graphical interface, manual setting of range, pulse width, and measurement time
- Maximum range up to 140 km

#### Optical Power Meter (OPM)

- Dual-wavelength testing, real-time display of optical power (dBm/mW)
- Automatic frequency recognition, supports CW mode

#### Visual Fault Locator (VFL)

- 650nm visible red light, supports continuous and flashing modes
- Quickly locate fiber breaks, bends, and other faults

#### Optical Loss Test

- Tests insertion loss of optical components to ensure optical signal transmission quality

#### Ethernet Testing

- Supports IP scanning, PING, PPPOE testing, and other functions

#### Remote Testing

- Breaks down space limitations by supporting remote operation and data transmission

#### App-based Bluetooth Control

- Remotely control and manage devices via the mobile app

### Applicable Scenarios

1. Fiber-to-the-Home (FTTH) installation and maintenance
2. Fiber optic cable line fault location and diagnosis
3. Data center structured cabling testing
4. Optical communication equipment commissioning and acceptance
5. Network operation and maintenance, education and training



### Summary

The TFN F4 Series OTDR is designed with "professional, convenient, and cost-effective" in mind. It integrates a variety of practical functions, features a large display, and an intelligent operating system, significantly improving on-site testing efficiency and user experience. Whether it's routine installation and maintenance or complex troubleshooting, the F4 Series provides reliable and efficient solutions, making it an ideal partner for fiber optic network maintenance personnel.

### Note

1. The F4, as the standard model, offers excellent value for money and is popular with buyers. TFN maintains a large inventory of English versions.
2. The F4 currently supports OEM customization and language customization (supported languages: Spanish, Portuguese, Arabic, Korean, Russian).
3. In addition to the F4, TFN also supports customization of different wavelengths and dynamic ranges, including:

Model Name	Wavelength	Dynamic Range
F4-V1	1310/1550nm	42/40dB
F4-V2	1310/1550nm	45/43dB
F4-SMV	850/1300/1310/1550nm	26/30/37/35dB

4. For OEM customization, the minimum order quantity is 10 units per model.

