



## TFN F-D1 F-D2 Handheld Laser Source

### (Single-mode/Multi-mode/Single-mode & Multi-mode in one)

Featuring a single-mode/multi-mode integrated design with multi-wavelength output capability, this device serves as an ideal tool for rapid testing of fiber connectivity and link loss during fiber optic communication installation, maintenance, and acceptance.



#### Core Features

- Dual-mode integrated design with flexible switching  
Multimode: Supports 850nm and 1300nm wavelengths; Single-mode: Supports 1310nm and 1550nm wavelengths  
Single-Multimode Hybrid: Supports 850nm, 1300nm, 1310nm, 1550nm wavelengths  
One device meets diverse testing scenarios, eliminating redundant purchases
- Multi-frequency modulation for strong anti-interference capability  
Supports 270Hz, 1kHz, and 2kHz modulation frequencies  
Suitable for complex optical environments with enhanced signal recognition accuracy
- Extended battery life, plug-and-play operation  
Powered by 3 AA batteries, delivering over 16 hours of operation  
No charging required; easy battery replacement for extended field operations
- Adjustable power with stable output  
Output power  $\geq -5\text{dBm}$ , supports 6dB attenuation adjustment in 1dB increments  
High stability:  $\pm 0.05\text{dB/hour}$  ensures reliable test data  
Built-in VFL (optional)
- Supports 1mW/10mW VFL output for fiber identification and fault location assistance

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

1. Single-mode and multimode fibers require separate equipment purchases---Single-unit design compatible with both fiber types
2. Unstable test data with high error margins—High-stability laser source at  $\pm 0.05\text{dB/hour}$



ensures reliable data

3. Extended field operation time with short device battery life—16-hour extended battery life, sustained operation with just 3 AA batteries
4. Complex operation with limited functionality—Intuitive button layout supports one-touch switching for modulation, attenuation, and wavelength selection
5. Inability to quickly determine fiber continuity—Multi-wavelength + optional VFL for rapid fiber status identification

### Product Specifications Overview

Basic Parameters		
Item	Single-mode & Multi-mode	Single/Multimode Combo
Center Wavelength	1. 850/1300nm ± 20nm; 2. 1310/1550nm ± 20nm	850/1300/1310/1550nm ± 20nm
Output Power	≥-10dBm@850/1300nm	≥-6dBm@1310/1490/1550/1625nm
Laser Type	FP-LD	DFB-LD
Stability	±0.05 dB/hour; ±0.1 dB/8 hours	
Modulation Frequency	270Hz, 1kHz, 2kHz	
Interface Type	FC/PC (customizable)	
General Function		
Output Mode	CW, 270Hz, 1kHz, 2kHz	
Power Adjustment	6dB range, 1dB steps	
Auto Power Off	10 minutes of inactivity (cancellable)	
Battery Type	3 AA batteries	
Operating time	Over 16 hours	
Built-in VFL	1mW/10mW selectable (optional)	

### Suitable Scenarios and Users

- Fiber optic network construction and acceptance personnel
- Telecom operations and maintenance teams
- Data center fiber link testing
- Laboratories, educational institutions, and research organizations
- Fiber Optic Equipment Manufacturers and Integrators

### Why Choose This Handheld laser source?

1. Dual-Mode in One Device: Single-mode and multi-mode in one unit, saving equipment and costs
2. Stable and Reliable: Consistent output power ensures accurate and trustworthy test data
3. Simple Operation: Clear buttons, intuitive functions, quick to master
4. Long Battery Life: 16 hours of continuous operation without power interruptions
5. Flexible Customization: Supports optional interfaces and VFL functionality to adapt to diverse requirements