



TFN FB47 Trolley-type Two-Speed Multiple Pulse Cable Fault Quick Detection System



Product Overview

The FB47 is an all-in-one cable fault detection system integrating distance measurement, path detection, pinpoint positioning, and high-voltage signal generation. Designed for power cables up to 35KV, it enables rapid fault location and diagnosis with high integration, user-friendly operation, and precise results. Ideal for power maintenance, municipal engineering, and railway power supply.

Key Features

- Three-Level Pulse Ranging: Automatically determines fault distance with clear waveforms; suitable for high-resistance and flashover faults.
- Path Tracking & Depth Measurement: Supports live/de-energized cable path finding, depth measurement, and sheath fault detection.
- Acoustic-Magnetic Synchronous Pinpointing: Features noise suppression, distance display, and directional indicators for noisy environments.
- Integrated HV Signal Generator: Offers DC, single pulse, and periodic pulse modes with safe, insulated design and easy wiring.

Customer Pain Points & Solutions

Pain Point	FB47 Solution
Hard-to-locate high-resistance faults	Three-pulse method with clear waveform & auto-distance judgment
No external power on site	Built-in lithium battery supports operation without grid power
Strong environmental interference	Digital filtering + BNR noise reduction for accurate signal capture
Complex operation & safety risks	Fully insulated, voice-guided, one-touch



	operation
Short cable fault detection difficulty	Vacuum discharge gap with no interference

Technical Specifications

- Ranging Host: 200MHz sampling rate, >64km range, 0.1m accuracy
- Path Detector: 31 frequency options, depth measurement 0 ~ 20m, $\pm 5\%$ accuracy (within 3m)
- Fault Locator: Acoustic-magnetic sync, 4.3-inch OLED, BNR noise reduction
- High Voltage Generator: Output 0 ~ 32KV, discharge energy >2000J, cycle 5 ~ 30s adjustable

Application Scenarios

1. Urban distribution network cable fault detection
2. Power maintenance in railways, tunnels, and industrial plants
3. Substation and distribution room cable inspection
4. Cable laying project acceptance and maintenance

Why Choose FB47?

- ✓ All-in-One System: Combines ranging, path detection, pinpointing, and HV generation
- ✓ Smart & Safe: All English UI, voice prompts, auto protection
- ✓ Strong Anti-Interference: Narrowband filtering, acoustic-magnetic sync, noise suppression
- ✓ Portable & Efficient: Trolley design, built-in battery, fast fault location