GP150 Fiber Optic Cable Identifier -- Accurately identify and locate hundreds of kilometers of fiber optic cables with a single fiber.

Product Overview

The GP150 is a revolutionary fiber optic cable testing and identification tool from TFN. Based on advanced Rayleigh scattering and digital processing technology, it can locate, identify, and survey long-distance optical cables using a single fiber, eliminating the need for loopbacks at the cable ends. This greatly simplifies the process of identifying specific optical cables in complex pipeline environments, making it an ideal tool for telecommunications operators and engineering teams performing line maintenance, repairs, and resource management.

Core functions of the product

- Single fiber testing, no loopback required

This method revolutionizes traditional testing methods by allowing testing to be performed simply by connecting the fiber optic cable to the test port without any end-processing or loopback . This is particularly useful for scenarios with broken fiber optic cables, cables terminated with APC connectors, or cables that are otherwise inaccessible, greatly enhancing field operation flexibility.

- Ultra-long distance sensing and testing

With ultra-long-distance testing capabilities of up to 40 kilometers , it can easily meet the survey needs of long-distance optical cables such as intercity trunk lines and long-distance lines.

- Excellent anti-crosstalk capability

avoid crosstalk between adjacent optical cables when distinguishing multiple closely laid optical cables, ensuring the accuracy of the search results and avoiding misjudgments.

- Non-destructive testing and high adaptability

Using non-destructive testing technology, the GP150 can effectively work regardless of whether the cable is terminated with a PC or APC connector, or even a non-reflective end face, with strong environmental adaptability.

- Intuitive intelligent recognition

Real-time audio prompts are combined with waveform display . When the target optical fiber cable is knocked or disturbed, the device will sound an alarm and display the unique waveform characteristics on the screen, making the identification process intuitive and simple.

Solve your core work pain points

- Pain point: In complex pipelines, manholes, or overhead lines, it is difficult to accurately identify a target cable from a bundle of optical cables.

GP150 Solution: Accurate identification and anti-crosstalk design can effectively distinguish adjacent optical cables, leaving the target optical cable with nowhere to hide.

- Pain point: The end of the optical cable is located in an inaccessible area (such as the other party's equipment room), making loopback testing impossible.

GP150 Solution: Single-ended testing technology completely gets rid of dependence on the terminal environment and can be carried out anytime and anywhere.

- Pain point: Traditional OTDR and other equipment cannot effectively identify optical cables over short distances or at specific physical locations.

GP150 Solution: By sensing mechanical vibration and combining it with real-time audio and waveform feedback , it enables tactile identification of optical cables, making positioning more direct.

- Pain points: On-site equipment has short battery life and complex operations, affecting work efficiency.

GP150 Solution: The low-power design supports up to 10 hours of continuous operation. Combined with a 5.6-inch touch screen and dual-button operation , the interface is user-friendly and easy to use.

Main technical parameters

project	Specification
Product Model	GP150
Measurement method	Single fiber testing, no loopback required
Working wavelength	1550 nm ± 20 nm
Test distance	40 km
One-way optical cable loss	14 dB
Signal-to-noise ratio (SNR)	≥25 dB (typical)
Initial blind spot	No blind spots
Output method	Real-time audio prompts, waveform display

project	Specification
Fiber type	SMF (Single Mode Fiber)
Connectors	FC/APC
Working hours	>10 hours
show	5.6-inch touch screen, support button operation

Wide range of application scenarios :

1. Telecommunications operators: ODF rack fiber jumper installation in the computer room, line modification, maintenance and repair, optical cable resource survey and standardized management.
2. Engineering construction: Accurately identify and mark target optical cables in complex environments such as pipelines, tunnels, manholes, and overhead lines, providing a basis for cutover and capacity expansion.
3. Resource management: Conduct resource inventory of existing optical cable networks, establish accurate line files, and achieve refined asset management.
4. On-duty maintenance: Quickly locate and troubleshoot line faults to shorten service interruptions.

Why choose GP150 optical cable survey instrument?

Simplify, efficiently, and reliably manage complex and specialized fiber optic cable identification tasks. Its unique single-ended testing capability solves the most challenging field access challenges, while its ultra-long testing distance and robust interference immunity ensure outstanding performance in a variety of demanding scenarios. Choosing the GP150 means you'll have access to an intelligent fiber optic cable management solution that significantly improves work efficiency and reduces operating costs.