TFN DG15M High Anti-interference Cable Fault Tester

Accurately locates and troubleshoots in complex environments

Product Overview

The DG15M is a multifunctional cable fault tester designed for complex electromagnetic environments. It integrates the functions of locating broken cables, short circuits, and ground leakage currents , as well as cable routing. It is optimized for use in high-interference environments, such as under high-voltage cables and in cable trenches. It is an ideal tool for rapid underground cable maintenance in industries such as power, communications, and municipal administration.

Core Functions of the Product :

1. One-click multi-function test

- Length test: In the power-off state, quickly determine the cable break, the distance to the short-circuit fault point and the total cable length.
- Leakage detection: Accurately locate ground leakage faults caused by damaged insulation layers of buried lines (insulation resistance within 0.5 megohms).
- Path finding: Easily detect the path direction and buried depth of underground cables , facilitating construction and maintenance.

2. Original high anti-interference design

Unique anti-interference channel uses a high-performance filtering circuit to effectively suppress power-frequency interference. Even in strong interference environments like under high-voltage lines, near transformers, and in cable trenches, the signal remains clear and stable, eliminating noise interference.

3. Intelligent diagnosis and waveform analysis

- Waveform comparison function: It can simultaneously display and compare the waveforms of "good line" and "fault line", and intuitively judge the fault type and location through the graphical interface, reducing dependence on operator experience.
- Manual test mode: supports manual setting of key parameters such as beam speed and gain to meet the in-depth customized testing needs of professional users.

4. Integrated signal generator and digital multimeter

Built-in adjustable signal generator (adjustable amplitude, frequency and type) provides the best signal source for various test scenarios.

The integrated multimeter function can directly measure voltage, loop resistance, and insulation resistance , allowing for quick on-site screening of line status in one step.

Solve your core work pain points :

- Pain point: Traditional equipment cannot work due to severe signal interference in complex environments such as high-voltage lines and cable trenches.
- DG15M Solution: High anti-interference design ensures clear signal capture and precise positioning even in the worst electromagnetic environments.
- Pain point: When the inner core wire of the armored cable fails, the signal is shielded by the outer armor, making it difficult to detect.
- DG15M Solution: The length test function is not affected by the outer armor shielding and can directly measure the precise distance of the broken wire and short circuit point for rapid positioning.
- Pain point: The fault waveform is complex and difficult to identify, making it impossible to determine the fault location.
- DG15M Solution: The unique waveform comparison function makes fault points visible and easier to judge by comparing good and bad line waveforms.
- Pain point: Multiple tools need to be carried on site, such as multimeters and signal generators, which makes the operation cumbersome.
- DG15M Solution: The multifunctional integrated design integrates all necessary functions into one machine, reducing the load and improving efficiency.

Wide range of application scenarios :

1. Power system: Troubleshooting of high and low voltage underground cables of 10kV and below.
2. Communication network: Maintenance of power cables and communication cables of tower communication base stations.
3. Municipal engineering: path finding and fault location of street light lines and traffic signal lines.
4. Agricultural irrigation: inspection and maintenance of underground cables in farmland irrigation areas.

Customer FAQ :

Q: Can DG15M be used under high-voltage lines?

Absolutely . This is the core advantage of the DG15M. Its high anti-interference design is specifically designed for such complex environments, ensuring signal stability.

Q: Can armored iron cables be tested?

A: Yes. Whether it is armored cable or ordinary wire, DG15M can effectively test it.

Q: What voltage level of cables can be tested?

A: It can test various types of cables ranging from several hundred volts to less than 10kV .

Q: What specific fault types can be detected?

A: It can comprehensively detect cable breakage, short circuits, and ground leakage faults, and can also detect the path of buried cables .

Why choose DG15M?

Comprehensive solution for complex field conditions . Designed from the ground up to address the biggest pain point of traditional equipment— poor anti-interference capabilities —it significantly reduces the difficulty and time of troubleshooting through multi-functional integration and intelligent waveform analysis , enabling every field engineer to become a troubleshooting expert.