

GD-7018A Fiber Identifier



The 7018 series optical fiber pipeline identifier can accurately locate and measure depth of the underground pipelines, cables and optical cables under the condition of without digging, and accurately find the damage points of the outer coating of the underground pipelines and the location of the underground cable fault points. The instrument incorporates the most advanced technologies such as ultra-narrow band filter, Bluetooth wireless communication, GPS positioning, automatic data mapping by professional data analysis software and automatic generation of test reports. The detection and inspection of various kinds of metal pipelines, pipeline management and maintenance, municipal planning and construction, pipeline inspection in power supply and other departments is one of the necessary instruments for pipeline maintenance units.

Features

(1) Multiple functions

1. Transmitter function: It has three signal application modes of induction method, direct method and clamp method, suitable for different occasions.
2. Receiver function: Used to measure the location, direction, burial depth and current in underground pipes and cables.

3. The left and right positioning arrows indicate the location of the target pipeline, and the locationing is fast and accurate; the front and rear arrows and the dB value indicate the location and size of the damage point of the anticorrosive layer.
4. With backlight function, suitable for emergency rescue at night.
5. GPS geographic positioning function, automatic pipeline mapping.
6. Professional data analysis software, automatic generation of test report.
7. The unique functions of the 7018 series receiver: It is used to locate faults (pipeline failure refers to the damage of the outer anti-corrosion layer, cable failure refers to the damage of the outer protective layer), and to detect the insulation damage of underground pipelines.
8. Current measurement: measure the current applied by the transmitter to the pipeline under test.
9. Multimeter function: it can measure output voltage, line voltage, line current, impedance and power. Test the continuity and insulation quality of the cable before and after the cable fault search.
10. External induction clamp: suitable for the place where the signal cannot be directly connected when detecting the cable.

(2) High positioning accuracy:

1. A variety of measurement modes for pipeline positioning (valley mode, peak mode, wide peak mode, peak arrow mode) can be mutually verified to ensure the accuracy of pipeline positioning.
2. Maximum method: peak mode, wide peak mode, peak arrow mode can be used to measure the change of horizontal component (H_x) or horizontal gradient (ΔH_x), and locate according to the position of its maximum value;
3. The minimum method: Use the bottom mode to determine the position of the minimum value by measuring the change of the vertical component (H_z).

(3) There are many sounding methods:

1. A variety of detecting methods can be arbitrarily selected and can be mutually verified.
2. Direct reading method with dual horizontal coils;
3. Single level coil 80% method, 50% method;
4. 45 degree method.

(4) Strong anti-interference

1. Many observation parameters: both horizontal component (H_x), vertical component (H_z) and horizontal gradient (ΔH_x) can be measured.
2. High transmit power: The output power of the transmitter is up to 10W and is continuously adjustable. It can be arbitrarily selected according to needs.

3. More working frequencies:

Transmitter frequency: 128Hz, 512Hz, 1KHz, 2KHz, 8KHz, 33KHz, 65KHz, 83KHz.

Receiver frequency: radio, 50Hz, 100Hz, 512Hz, 1KHz, 2KHz, 8KHz, 33KHz, 65KHz, 83KHz.

4. According to the characteristics of the target pipeline (material, structure, buried depth, length, etc.), select the appropriate working frequency.

(5) Easy operation

1. Intuitive: A graphic display is used to continuously and real-time display various parameters and signal strength during the detection process.

2. Automatic: Automatically switch to the dual-level antenna mode and automatically adjust the receiver sensitivity when measuring the depth, so as to achieve the best measurement signal, and automatically return to the working mode before after completed.

(6) Long continuous working time and low use cost

The transmitter is equipped with a large-capacity lithium battery pack, which can meet the power supply needs of one field day for field detection by one charge, and can be recycled, which greatly reduces the cost of detection.

(7) Transmitter --AC and DC dual-use

Under normal situations, if the transmitter battery is full, use the built-in battery pack to supply power. If during use, the transmitter battery is low, but the detection task is not completed, you can directly connect a dedicated power adapter, the instrument can be used normally, without having to wait for the instrument to be fully charged before use.

Specifications

Technical Parameter	A	B	C	D	E
Locating Frequency	5	6	7	8	10
Frequency	512,1K,33K,83K	512,1K,33K,83K	512,1K,33K,83K	512,1K,33K,65K,83K	512, 1K, 2K, 33K, 65K, 83K
Passive Frequency	50Hz	50Hz 100Hz	50Hz 100Hz radio	50Hz 100Hz radio	50Hz 100Hz radio
Power Filter	×	×	√	√	√
Fault Frequency	×	×	×	×	2
Fault locating	×	×	×	×	√
Lithium ion battery	√	√	√	√	√
A Frame	×	×	×	×	√
Locating Depth(m)	6	6	6	6	6
Data storage	×	×	×	√	√