FB28 cable fault quick test system

CABLE FAULT TESTER

It can solve the power cable fault below 35KV
Automatic fault location distance, fault location is simple and easy


高压入
高压出
CENTRAL CONTROL UNIT
中央控制单元
Cable Fault Locator
Multifunctional transmitter
OUTPUT
高压脉冲
直流高压
高压 输出
Multifrequency Receiver
MODE

FB28

CABLE FAULT QUICK TEST SYSTEM

It consists of the following four units

Cable Fault Quick Test System

Fault location unit

All test waveforms are displayed as low-voltage pulse waveforms by the three-stage advanced arc reflection prepositioning technology, which realizes the automatic location of fault point distance and makes fault location simple and easy. The central control unit is an active energy storage device, which can automatically control the primary high voltage breakdown fault, the secondary active arc continuation, and the tertiary pulse sampling. It is necessary to realize the three-stage pulse method and improve the success rate of sampling.

Tracking and identification unit

It can solve the fault of short circuit and open circuit of the faulty cable to the ground insulation quickly and accurately locate, and can also locate the buried underground cable path and measure the cable laying depth. It is a new generation of cable fault test instrument, which reduces the complexity and difficulty of cable fault test and improves the safety.

Fault fixed-point unit

The precise locator equipped with the system has many functions, such as acoustic wave and electromagnetic wave digital size display, fault point distance warning, path monitoring, frequency band selection, storage and so on. At the same time, it is equipped with a noise-preventing pickup probe and a high-resistance earphone, so that it has a strong anti-interference ability and greatly reduces the human experience factor.

High voltage signal unit

The energy supply part of the cable fault reservation provides high voltage and high energy electrical pulses to the outside (the high voltage generator equipped with the system has the advantages of automatic voltage setting, single or continuous discharge, simple wiring, small size and light weight, etc.) The high voltage source equipped with the system is the traditional control box, booster, pulse capacitor discharge ball gap, discharge rod, digital processing with industrial control technology, and scientific integration The real sense of integration has been realized.

MORE VERSATILE
MORE THAN YOU THINK

Applicable to a variety of scenarios, more applications, waiting for you to unlock!

Suitable for various scenarios

Street lamp cable maintenance

Farmland irrigated land cable fault inspection and repair

Residential and garden green belt cable

Field power cable

Highway cable

Factory and mining enterprise cable

The measurement method is simple and fast

FAULT LOCATION UNIT

Three-stage pulse ranging host and central control unit

Suitable for various scenarios

Function and characteristics

Function and Characteristic

TIPS 01 / It can measure the high and low resistance faults of all cables of 35KV and below, and adapt to a wide range.

TIPS 02 / Using the international advanced "three-stage pulse method" and "three-stage multiple pulse method" test technology. At the same time, it also has the traditional high-voltage flashover method and low-voltage pulse method.

TIPS 03 / Any high-resistance fault presents a simple waveform · characteristic similar to the low-voltage pulse short-circuit fault, which is easy to interpret.

TIPS 04 / With user-friendly software and a **convenient** menu, key definitions are simple and clear. The measurement method is simple and fast.

TIPS 05 / The central control unit is used to control three levels of signal output in sequence with one key to ensure safety and success rate. The central control unit can prompt, operate steps, and monitor work progress.

TIPS 06 / With the test waveform storage function, the field test waveform can be conveniently stored in the instrument according to the specified order for observation at any time. A large number of field test waveforms can be stored.

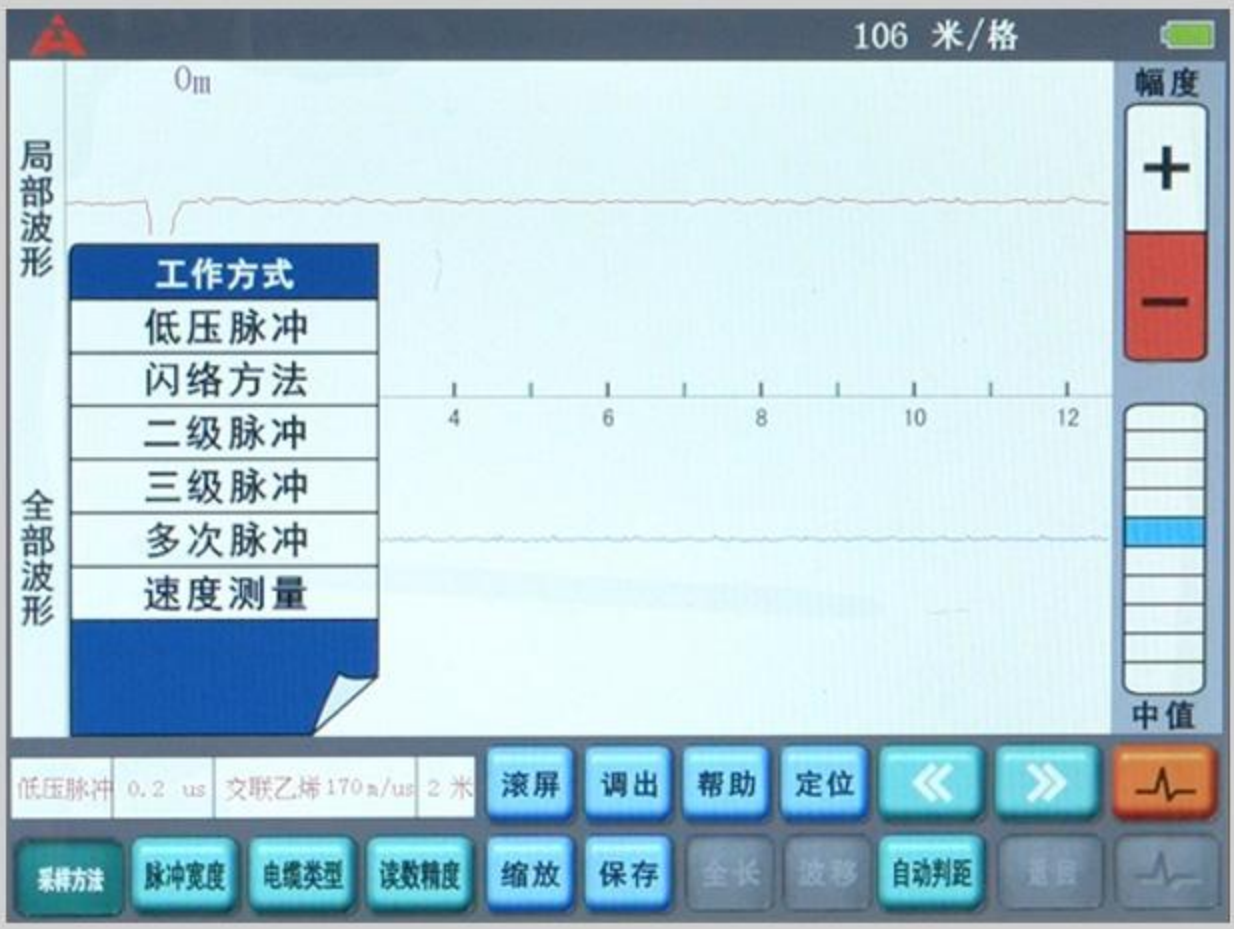
TIPS 07 / The measured waveform of fault point and full-length open-circuit waveform of good phase can be displayed on the screen at the same time for comparison and superposition, and the fault distance can be automatically judged.

TIPS 08 / 11 inch super bright color touch LCD display, with powerful data processing capabilities and friendly display interface.

TIPS 09 / With extremely safe sampling high voltage protection measures.

TIPS 10 / With 232 computer communication interface and USB communication interface, it is convenient to save data and graphics in the computer.

TIPS 11 / The built-in power supply can test the open circuit and low resistance short circuit fault of the cable in the environment without power supply.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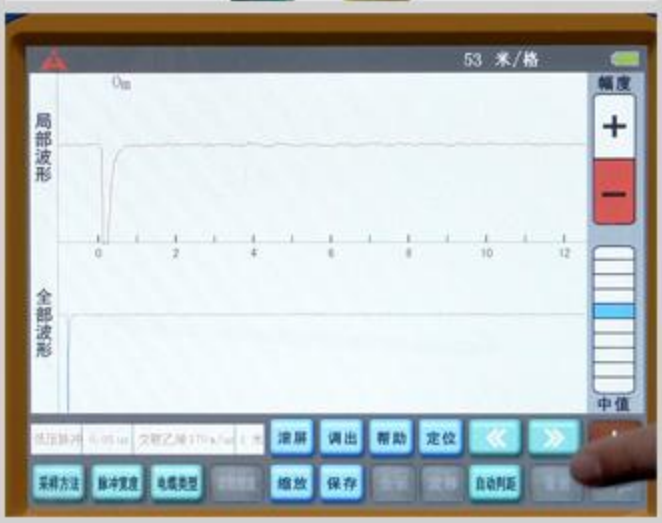
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缩放
保存
自动判距

TECHNICAL PARAMETER	
Test method	Low voltage pulse method, flashover method, two stage pulse method, three stage pulse method, multiple pulse method, speed measurement
Data sampling rate	100MHZ、50 MHZ、25MHZ、12.5 MHZ
Test distance	>64KM;
Reading resolution	1M
System test accuracy	0.1M
The pulse width of the test cable is provided with	"0.05", "01", "0.2", "0.5", "1", "2"," 8" microseconds
Built-in power supply	After full charge, the instrument can work continuously for more than 3 hours, and can also work with external AC power supply.
Working conditions	Temperature -30° C ~+45° C
CENTRAL CONTROL UNIT TECHNICAL SPECIFICATIONS	
Control mode	One key control, in turn trigger three levels of signal sequence output.
Storable energy	300J
Operating voltage	220V,50HZ
Work loss	100VA
Overall dimension	450MM×360MM×320MM
weight	12KG
Operating ambient temperature	-30℃~+50℃

The measurement method is simple and fast

PATHFINDING AND IDENTIFICATION UNIT

T7000 cable path finder

Pathfinder receiver

recharger

Coupling clamp

Sampling line

Connecting line

FB28 path analyzer

Function and characteristics

Function and Characteristic

TIPS 01	/	It can quickly and effectively determine the underground optical cable, cable direction and depth, and determine the skin fault.
TIPS 02	/	Determine the direction of the cable (pipeline), with signal strength indication, left and right arrow indication, compass direction indication.
TIPS 03	/	With current direction indication to prevent string interference.
TIPS 04	/	Depth of digital direct reading display cable (optical cable) : 0-20 meters, precision 5% within 3 meters, accuracy 10% within 8 meters,
TIPS 05	/	It has a special mode for fault detection, which can be used to detect the failure of the skin and the damage of the cable.
TIPS 06	/	Automatic sounding: When the instrument is correctly placed vertically above the pipeline, the true depth of the target pipeline is automatically displayed.
TIPS 07	/	Signal recognition: From the signal amplitude, signal direction, signal phase three dimensions of optical cable, cable accurate identification.
TIPS 08	/	Current direction indicator: with a unique technology, it can display the current direction and phase of the tracking signal, effectively improving the accuracy of finding the path.

TRANSMITTER TECHNICAL PARAMETERS

The machine is a multi-frequency high-power transmitter with constant power output and automatic matching of external load to ensure that the machine works in a good state. With ohmmeter function, it can detect external voltage and test continuous loop resistance, which can help determine the fault nature.

Optional frequency:

Output 31 kinds of frequency sinusoidal AC signals, respectively 98HZ, 128HZ, 256HZ, 480HZ, 491HZ, 512HZ, 577HZ, 640HZ, 815HZ, 982HZ, 1.02KHZ, 1.17KHZ, 1.45KHZ, 1.52KHZ, 4.1KHZ, 8.01KHZ, 8KHZ, 8.44KHZ, 9.5KHZ, 9.82 KHZ, 29.4KHZ, 33KHZ, 38 KHZ, 65.5 KHZ, 78.1KHZ, 80.43 KHZ, 82.3KHZ, 83.1KHZ, 89KHZ, 133KHZ, 200KHZ, fault detection and pipeline identification signal FFLOW, FFHIGH, Current direction signals SSLOW and SS HIGH.

With FF fault detection frequency, route tracking signal and fault location signal can be sent simultaneously

Ohmmeter function, can detect external resistance, external danger voltage warning
Three signal transmission methods (direct connection method, coupling method, induction method)
Automatic load adjustment
The output power is adjustable, low, medium, high and full gear four kinds of gear. Large output current is not less than 999MA; Large output power is not less than 12W
· Large capacity lithium battery power supply, can work for 8 hours at full load

RECEIVER TECHNICAL PARAMETER

The receiver uses a 3.5-inch 24-bit color true color LCD display to display signal strength digital, amplitude light bar, compass pointing, left and right arrow pointing, current direction indication, used to indicate the strength of the signal, optical cable positioning, fault detection, optical cable identification, depth measurement.
There are 5 display modes: wide peak value, valley value, narrow peak value, wide peak value arrow, peak value plus valley value
With broadband reception technology, personalized customization can be provided according to customer needs (within 100HZ-200KHZ)
Available frequencies: 50HZ, 60HZ, LF, 577HZ, 8KHZ, 33KHZ, 82KHZ, 133KHZ, SSLOW, SSHIGH.
Digital direct reading depth range: 0~20 meters. Accuracy: within 3 meters ±5%, within 8 meters ±10%.
Display content: signal strength, signal amplitude light bar, left and right arrow indicator, compass direction indicator, current direction indicator, current phase display, real-time depth indicator.
The external A-frame can be connected to accurately locate cable faults.
External coupling clamp for accurate cable identification.
Signal recognition: From the signal amplitude, signal direction, signal phase three dimensions of optical cable, cable accurate identification.
Current direction indicator: with a unique technology, it can display the current direction and phase of the tracking signal, effectively improving the accuracy of finding the path.
Sound indication of signal strength with adjustable volume.
3.5-inch 24-bit color true color LCD. The backlight brightness can be adjusted to adapt to various environments.
Large capacity lithium battery power supply, lasting 8 hours.

Intelligent positioning device

FAULT FIXED-POINT UNIT

Highlight the fault point discharge sound has higher sensitivity and anti-interference

Suitable for various scenarios

Function and characteristics

Function and Characteristic

TIPS 01	The display part uses a bright 4.3-inch OLED color LCD to make the display interface more clear.
TIPS 02	Function and parameter adjustment using a one-button programmable pulse code key, making the operation panel more concise, while the operation is more convenient.
TIPS 03	The instrument will collect and display the waveform of the audio part in real time, and can roughly observe the distance of the fault point by observing the repeatable waveform characteristics and the distance from the axis, and the operator is not easy to fatigue when observing the waveform.
TIPS 04	In the acoustic signal acquisition using 4 kinds of filter frequency band, low frequency band, middle frequency band, high frequency band and full frequency band, users can choose according to the actual situation of the field.
TIPS 05	The digital filtering technology is used to filter the audio part, which makes the characteristic frequency band more obvious and the filtering performance is better.
TIPS 06	Excellent discharge sound quality with quieter background for fast and reliable fault location.
TIPS 07	Automatically sets the trigger threshold of the sound channel.
TIPS 08	Intelligent background digital noise reduction technology BNR.

TIPS 09 / Turn on and off the shock discharge sound limit.

TIPS 10 / Fully automatic mute technology effectively protects the operator's ears from additional noise caused by the movement of the sound probe when the operator moves the sound probe.

TIPS 11 / The left and right direction indicator function of the cable provides more accurate cable position.

TIPS 12 / Fault point distance display, in the range of 0-99.9MS (0-30m) can display the distance of the fault point.

TIPS 13 / Display 8 historical electromagnetic signal amplitudes in bar chart form.

TIPS 14 / 1 minute No operation or electromagnetic signal is performed. The backlight of the display automatically darkens.

TIPS 15 / With high voltage step voltage function, boot can be selected. Equipped with A-frame.

TECHNICAL PARAMETER

The impact discharge gain amplification is greater than 120DB, and the impact discharge sound limit of 84DB can be turned on or off.	
Sensor dynamic range	Sound channel>110DB, electromagnetic channel>110DB
Sensor operating frequency range	100HZ~1500HZ
Filter frequency band Settings	Full frequency band 100HZ to 1500HZ Frequency band 150HZ to 600HZ The low band ranges from 100HZ to 400HZ High frequency band 200HZ~1500HZ
Fault distance display	0--100MS/0--30M
Audio test accuracy	0.1MS
Electromagnetic intensity display	Rectangle bar display, large value record display
Cable left and right direction indication function	
Fully automatic mute technology	
1 minute No operation or electromagnetic signal is performed. The backlight of the display automatically dark	
Power supply: Lithium battery, 7.4V--4.2AH.	
Continuous working time: more than 8 hours.	
Display: 4.3-inch bright OLED display (480*272).	
Working environment temperature: -20° C --70 ° C.	
Host size: 240*130*120MM.	

Locate the short cable fault

HIGH VOLTAGE SIGNAL UNIT

Integrated high-voltage signal generator with battery

Function and characteristics

Function and Characteristic

TIPS 01 / Closed box structure, all high-pressure equipment and high-pressure ports are not exposed to ensure safe operation.

TIPS 02 / Using large screen color liquid crystal compass display, more intuitive display of discharge voltage and current value

TIPS 03 / High degree of integration, the high voltage switching power supply, high voltage pulse capacitor, unique pulse output mechanism, automatic discharge mechanism, discharge rod in one, the whole process is completely insulated to achieve the safety first requirements of the wiring simplification.

TIPS 04 / The instrument has a high degree of automation, with the function of automatic discharge of discharge rod after power failure and automatic protection of overcurrent. In particular, the high voltage switch is controlled by the digital pulse circuit, which realizes the high voltage pulse generator with automatic frequency adjustment as the voltage rises.

TIPS 05 / With continuous high voltage pulse, high voltage direct current, single high voltage pulse three modes of operation, users can choose according to their needs. For example: DC high voltage is selected for three pulse sampling, single high voltage pulse is selected for flashover sampling, and continuous high voltage pulse is selected for fault point.

TIPS 06 / With single discharge, periodic discharge function, adapt to different cable fault properties, suitable for all kinds of imported and domestic cable fault tester.

TIPS 07 / Desktop structure, all control, operation and display devices are set in the front panel, intuitive display, easy to operate

TIPS 08 / Boost, spark, discharge device integration, wiring, simple operation, convenient, small size, light weight, easy to carry.

TIPS 09 / The control loop is designed with electronic technology to improve safety and reliability

TIPS 10 / Small size takes up little space and can be used safely in a narrow environment

TIPS 11 / It can work on battery power without MAINS electricity.

TECHNICAL PARAMETER
Pulse high voltage output: 0~36KV, negative polarity, continuous adjustable
Dc high voltage output: 0~36KV, large output current: 100MA
Built-in capacitance: 2UF
Working mode: DC/single pulse/periodic pulse
Discharge period: 5S (can be customized 5~30S adjustable)
Discharge energy: 1800J (up to 3600J)
Power supply: 220V±10%, 50HZ±1%
Working conditions: Temperature -30° C ~+45° C,
Relative humidity: 90%.
Volume: 350 MMx280 MMx350MM