**GDXG-F Overhead Transmission Line Fault Locating System**

## General Information

GDXG-F Overhead Line Low Current Ground Fault Locator is suitable for overhead line of low current grounding system. Once single-phase grounding fault occurs and the line is out of service, the equipment can be used for precise locating the fault position..

GDXG-F is a set of portable equipment, which can be used for fault location of multiple lines. The whole equipment consists of transmitter, sensor, receiver and accessories. After the fault line is out of operation, the transmitter will apply ultra-low frequency and high voltage signals to the line to make the fault reappear. Along the line, the sensor will be hung up on the line to detect the signals with an insulating rod, and the data will be transmitted to the receiver on the ground in a wireless way, and the receiver will display the measurement results. Before the fault point, the current persists; after the fault point, the current disappears. The fault location can be determined quickly by rough segmentation and then precise fixed point.

**Features**

- It is suitable for the distribution network of small current grounding system to detect the single-phase metallic grounding, arc grounding, transition resistance grounding and other faults of overhead lines.
- Positioning after line out of service, especially for fault lines with cable branches.
- High voltage signal is applied to make fault recurrence, current signal is stable and easy to detect.
- Ultra-low frequency signals avoid the influence of distributed capacitance of the system and can locate high-resistance faults.
- Transmitter safety features: high voltage start blocking function, allows direct short circuit output.
- High sensitivity sensor, opening design, no need to close, easy to connect on the line.
- Sensor and receiver wireless communication transmission, safe and reliable.
- Transmitter can be powered by a municipal power supply, or a generator,, sensor and receiver powered by dry battery.
- Transmitter is small size and light weight; Sensor is designed to minimize the volume and weight to facilitate the connection along the line; Receiver is designed for handheld use.
- The receiver adopts large-screen liquid crystal display to display sensor state, current waveform and current value.

**Specification**

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| Locating Accuracy | 0.2m |
| Transmitter Output Characteristics | Output frequency :1Hz |
| | Open circuit voltage : basic wave effective value::0~2800V, (DC impulse, peak value 8kV, equivalent to the peak phase voltage of 10kV line) |
| | Short circuit current : base wave effective value 0~35mA (DC impulse, peak value 100mA) |
| | Wireless communication distance between sensor and receiver : not less than 100m |
| Power Supply | Transmitter: AC 220V or generator(output power ≥1500W)<br>Transmitter power: Max. 900W |
| | Sensor : No. 5 alkaline dry battery*3 |
| | Receiver : No. 5 alkaline dry battery*5 |
| Dimension | Transmitter : 417*234*318 mm |
| | Sensor: 180*100*35 mm |
| | Receiver : 205*100*35 mm |
| Weight | Transmitter : 16.8kg |

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|---|---|
| | Sensor: 0.45kg |
| | Receiver : 0.45kg |
| Operating Environment | Temperature: -10℃-40℃ |
| | Humidity: 5-90%RH |
| | Altitude: <4500m |