



Digiphone

Surge wave receiver for acoustic listening device

Benefits:

- ▶ **Best acoustic characteristics for quick and accurate cable fault pinpoint-location**
- ▶ **High precision due to selective filtering of magnetic signal**



Description

The Digiphone is a directional acoustic listening device for the pinpointing of flash-over faults on power cables. State-of-the-art technology and ease of handling enables even users without training to precisely locate cable faults in conjunction with a surge generator (thumper).

Working method

The Digiphone measures the signals received by specially developed magnetic and acoustic sensors, which are integrated in one housing.

The location of the buried cable can be determined by the direction and intensity of the magnetic field, produced by the impulse current of a surge generator (thumper). With the bargraph-indicator of the Digiphone, the intensity of the strength of the magnetic field can be measured. This has a maximum directly above the cable.

The acoustic locating is done by measuring the flash-over noise. A switchable filter is built-in to optimise the measurement. The bandwidth of this filter is designed to minimise ambient noise (wind, vehicles).

A coincidence measurement is possible by receiving and indicating the signals of both sensors simultaneously. Digiphone also allows measurement of the distance between the sensor and the fault resulting from the difference in time taken by the acoustic and magnetic signal.

The advantage of this method, that is not dependent on the strength of the signals, is to locate the fault, even if the cables are in ducts. Untrained operators are guided automatically to the fault by this method.

Scope of delivery

- ▶ Receiver
- ▶ Sensor
- ▶ Headphones
- ▶ Operation manual
- ▶ Instrument case
- ▶ 10 pcs. Battery 1.5 V / R6 / AA

Technical Data

Amplification adjustment range	acoustic channel > 65 dB magnetic channel > 50 dB
Display	LC-Display for measuring results and status information
Display range	00.0 ms to 99.9 ms 3 digit / 7-segment display
Overflow display	"OVFL" for DISTANCE values ≥ 100 ms
Frequency range with filter	100 Hz to 1.5 kHz (acoustic) 270 Hz to 1.5 kHz
Power supply	10 x 1.5 V, batteries (R6 (AA-size))
Operating period	approx. 16 hours intermittent operation
Dimensions	approx. 230 x 125 x 92 mm
Weight	approx. 1.25 kg (incl. batteries)

Performance features

Digiphone – the new acoustic listening device for pinpointing of flash-over faults on power cables:

- ▶ Light-weight receiver with carrying straps
- ▶ Handy sensor
- ▶ Excellent acoustic characteristics
- ▶ Switchable filter against ambient noise
- ▶ Auto ranging digital readout of relative distance to the fault
- ▶ Bargraph-indication of the magnetic field strength for locating the cable path
- ▶ LC-Display for clear readout
- ▶ Indication of battery condition
- ▶ High reliability by using rain-proof foil keys
- ▶ Rugged build for field operation