



ESG NT

Digital Earth Fault Locator

Benefits

- ▶ **Very high sensitivity**
- ▶ **Automatic adaptation to voltage level**
- ▶ **Automatic filtration of interfering signals**
- ▶ **Automatic zero calibration, no adjustments necessary**
- ▶ **History mode**
- ▶ **High-contrast color display**

The pinpointing procedure

Pinpointing means the precise location of faults in the cable sheath. These faults cause the measuring current to flow into the ground. When it exits the cable at the fault point, the measuring current builds a voltage gradient which can be measured by earth rods and earth fault locators. The accurate location of sheath faults is done by the step voltage method: as it approaches the fault point, the step voltage potential increases, decreasing with reversed polarity after it passes the fault. The change in polarity allows the fault to be located precisely.

Functional description

The ESG NT earth fault locator measures the step voltage potential produced by a test generator in the underground. Other existing underground distortions such as potential equalisation current, DC offset, 16 2/3 Hz or influences of cathodic protection systems are automatically detected and eliminated. The automatic zero calibration maintains display calibration continuously at zero.

The ESG NT has a high-contrast color display on which the measured step voltage is displayed in two ways: as a bar graph (similar to a conventional pointer instrument), and as a continuing "history-display" which shows both the current process and the last 5 to 6 measurement records. In this way, changes are displayed continuously and very clearly. The deflection of the instrument always indicates the direction of the earth fault.

Due to the proven SebaKMT EasyGo principle, almost no operational steps are required. Basic settings can be made in the easiest way possible by using the rotary encoder.

The ESG NT adapts automatically to the input voltage level. Neither manual calibration of the display and the zero point, nor the adaption of the measuring range is necessary.

Moreover, the ESG NT has an automatic pulse detection, which allows working with almost any type of pulse generator.

Scope of delivery

- ▶ Receiver ESG NT
- ▶ 2 earth rods
- ▶ 2 connection cables
- ▶ 1 set of batteries
- ▶ Manual



Technical data

ESG NT

Display	High-contrast color TFT, 320 x 240 pixels
Sensitivity	5 μ V ... 200 V
Suppression of disturbances	50/60 Hz, 16 2/3 Hz, KKS, DC
Zero adjustment	Automatically
Power supply	6 x LR6 Alkali-Mangan
Operation time	> 20 hours
Protection class	IP 54
Dimensions receiver (H x B x D)	65 x 225 x 100 mm
Weight receiver	0.9 kg (including batteries)
Length earth rods	1 m (dividable and isolated)
Weight earth rods	0.8 kg each
Length test leads	2 m



All advantages at a glance

- ▶ Automatic suppression of external potentials
- ▶ Automatic adaptation to the voltage level
- ▶ Automatic detection of the pulse rate
- ▶ Automatic zero adjustment
- ▶ Very high measuring sensitivity in the μ V range
- ▶ Very easy operation
- ▶ Cable mounting at the dividable insulated earth rod

Options

- ▶ A-Frame
- ▶ Vehicle Mounting

