



SPG 5-1000

Portable test and fault locating system

Benefits

- ▶ **Complete System for reliable testing, prelocation and pinpointing of faults in LV networks**
- ▶ **Patented ICEplus technology for T'eed LV distribution**
- ▶ **Compact and light construction**
- ▶ **Highest operator comfort for all user levels**
- ▶ **Highest safety standards**



Description

The SPG 5-1000 is a portable, multi-functional system for testing, fault conditioning, pre- and pinpoint location of faults in low voltage distribution networks.

The ingenious pre-location method "ICEplus" (patent pending) offers the operator an easy-to-use tool for pre-locating faults in branched systems, which so far were very difficult to locate. This test method uses the low frequency component of the impulse signals during a flash-over at the fault point in order to determine the distance.

The ICEplus method avoids the usual problems of TDR and ARM methods of reflection and attenuation in branches. Pre-location is possible irrespective of the number of T-joints in the section. The compact size and low weight have been made possible by using an electronic HV source, optimised capacitors and a newly developed HV switching system.

The unit is controlled via a PLC (Programmable Logic Control) with a built-in command knob and a graphic display for the test modes and parameters. The easy-to-use, self-explanatory software allows even less experienced operators to successfully work with the SPG 5-1000 while at the same time ensuring maximum safety.

Technical Features

- ▶ PLC with ¼ VGA display
- ▶ Easy-to-use software, providing a high level of operational comfort and safety
- ▶ Pre-location with ICEplus (optional) for accurate pre-location, independent of T-joints
- ▶ High surge output for acoustic pinpoint location
- ▶ Compact and rugged, using an electronic HV source and HV switch
- ▶ Rotary command knob EASYGO-Logo

The SPG 5-1000 is used for

- ▶ DC Testing up to 5 kV
- ▶ Automatic breakdown recognition
- ▶ Pre-location with ICEplus
- ▶ Fault conditioning/Burndown
- ▶ Acoustic pinpoint location.
- ▶ Sheath fault location (step voltage)

Technical Data

Display	¼ VGA display
Testing	0 ... 5000 V DC; timer
Leakage display	0 ... 1 mA; 0 ... 10 mA
Automatic flash-over identification	0 ... 5000 V DC
Prelocation (Option ICEplus)	0 ... 4000 V Surge voltage
Burning	0 ... 500 V with 1.0 A 0 ... 2000 V with 0.25 A 0 ... 5000 V with 0.1 A
Surge	0 ... 2000 V with 1000 J 0 ... 4000 V with 1000 J
Surge rate	Single pulse; 3 ... 20 sec.
Sheath fault location	0 ... 500 V/2000 V/5000 V
Pulse ratio	1:3 ; 1:6 (sec)
Operating temp.	-10 °C ... + 50 °C
Mains supply	230 V; 50/60 Hz (110 V optional)
Power input	600 VA max.
Dimensions (L x H x W)	520 x 560 x 430 mm
Weight	approx. 45 kg

Scope of Delivery

- ▶ **SFX 5-1000** SPG 5-1000 ICEplus Prelocation
Connecting Cables VLSPG5
Operating Manual
- ▶ **SPG 5-1000** SPG 5-1000
Connecting Cables VLSPG5
Operating Manual

Optional Accessories

- ▶ ICEplus pre-location
- ▶ Remote emergency-off NAG1
- ▶ Pinpointing receiver Digiphone
- ▶ Earth fault locating receiver ESG NT
- ▶ Line location system Ferrolux
- ▶ Frame with wheels