



# SPG 40

## Mobile Cable Test and Fault Locating System

### Description

The SPG 40 is a portable multi functional system for testing, fault conditioning prelocation and pinpointing of faults in medium and low voltage networks.

The compactness in size and weight has been made possible using an electronic HV source, switchable capacitors and a compact HV switching system.

The control panel of the SPG 40 is integrated into the unit and it is also available as a separate control box for flexible installation and operation. The main operation is done with one single rotary control button. Functions and settings are displayed on a clearly structured display.

The software supports easy handling and successful operation even by infrequent users, ensuring safety and optimum results.

### Features

- ARM-choke-filter (Arc Reflection Method) for operation with TDR prelocation (suggested TDR: Teleflex T 30-E).
- Comfortable operation with ¼ VGA display and rotary control button (easyGO by SebaKMT).
- Easy to use software, guaranteeing a high level of operational comfort and safety
- High output energy for acoustic pinpoint location.
- Two high voltage surge range alternatives, 0 ... 12.5 / 25 or 0 ... 16 / 32 kV
- Optionally two low voltage surge range alternatives, 0 ... 4 kV or 0 ... 8 kV
- Compact and rugged using an electronic HV source and HV switch.
- Adjustable burn current
- Comprehensive safety circuits checking ground loop resistance (FΩ), step potential (FU), rear doors (if van-mounted), int. and ext. emergency-off-button, over-temperature and more.
- Modes:
  - Insulation Test up to 5000 V
  - DC-Testing up to 40 kV with leakage current measurement and auto-shut-down upon cable breakdown.
  - Breakdown-Recognition with ramp function, auto-shut-down and display of breakdown voltage
  - Prelocating methods ARM (Arc Reflection Method), ICE (impulse current, surge pulse), Decay
  - Fault conditioning / burndown with adjustable current
  - Acoustic pinpoint location.
  - Sheath fault location (step voltage)

### Optional Accessories

- Remote emergency-off with warning lights
- Acoustic field location system **Digiphone**
- Earth fault locating receiver **ESG 80-2**
- Line location system **Ferrolux**

375 kWh

+ transformer 412 kWh

stand-alone unit



### Technical Data

|  |  |
|--|--|
| Display                                  | ¼ VGA display for user guidance, status information, input and test results; „single-button-operation“ |
| Insulation test                          | Voltages 1000 V and 5000 V<br>Ranges 1 kΩ, 1 MΩ, 100 MΩ  |
| DC testing                               | 0 ... 40 kV DC   |
| Leakage current                          | 0 ... 1/10/100 mA auto-ranging   |
| Breakdown recognition                    | 0 ... 40 kV;   |
| Burning                                  | 0 ... 8 kV ; 700 mA<br>0 ... 20 kV ; 100 mA  |
| Higher ranges surge voltage (standard)   | 0 ... 12.5 kV / 25 kV<br>or<br>0 ... 16 kV / 32 kV   |
| Low range surge voltage (optional)       | 0 ... 4 kV or 0 ... 8 kV   |
| Surge energy                             | 1000 J in each range<br>(optional 2000 J in vehicle mounted version)                                   |
| Surge rate                               | 3 ... 10 sec. and single pulse   |
| Sheath fault location                    | 0 ... 5 kV and 0 ... 10 kV   |
| Pulse ratio                              | Continuous, 1:3 ; 1:4 ; 1:6 (sec)  |
| HV-fault prelocation (with optional TDR) | ARM,<br>Impulse Current<br>Decay   |
| Operating temp.                          | -20 ... + 50 °C  |
| Mains supply                             | 230 V; 50 / 60 Hz (110 V optional)   |
| Power input                              | 1.7kVA max.  |
| Dimensions                               | 520 x 430 x 1050 mm (L x W x H)  |
| Weight                                   | approx. 116 kg<br>(incl. opt. surge voltage)   |

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