

## Data Sheet



### Surge and Test Generator STG 600

The Surge and Test Generator STG 600 is a multifunctional cable fault locating set especially designed for low voltage networks. The Surge and Test Generator is used for cable testing and for pin-pointing of high-resistance and intermittent faults in low voltage cables.

On request, a SIM coupling filter can be integrated into the STG 600 enabling the use of the high sophisticated and efficient pre-locating method: the **Secondary Impulse Method (SIM-MIM)**.

The multifunctional STG 600 replaces the following functions of individual instruments:

- **DC cable test set** by menu CABLE TESTING
- **Low voltage surge generator** by menu SURGE MODE
- **SIM coupling filter** by menu SIM (option)
- **Cable sheath fault location test set** by menu SHEATH FAULT LOCATION

#### Features:

- optimized unique fault location system for low voltage networks
- low weight, portable
- high surge energy 600 Ws (optional 1000 Ws)
- output voltage adjustable in 0.1 kV steps

#### **H.V. TEST (PTY) LTD**

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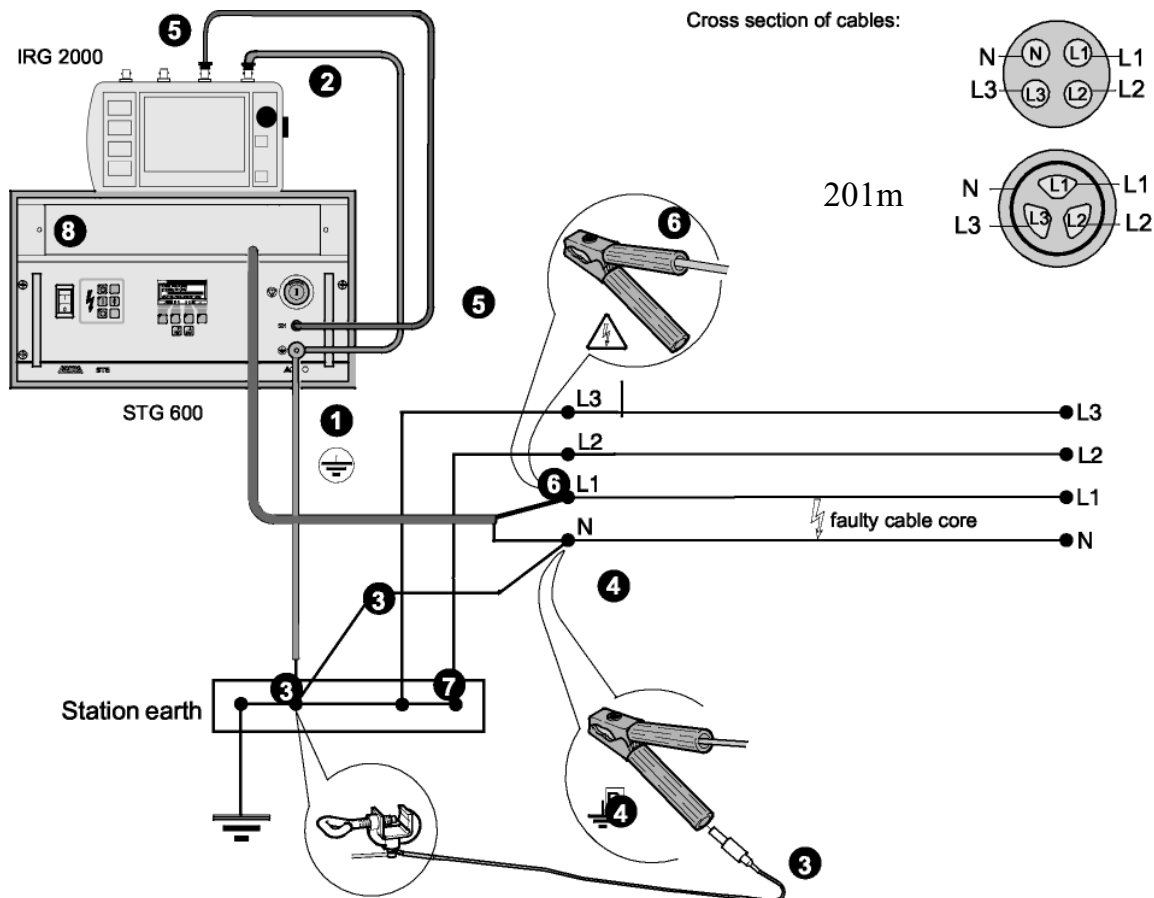
Website: [www.hvtest.co.za](http://www.hvtest.co.za)

- easy operation and self-explaining menu guiding
- automatic menu operated HV-switch
- backlit graphics LC display
- identification and display of short-circuit and breakdown faults in DC test mode
- integrated cable compartment
- protective cover for control panel
- designed for highest safety
- EMERGENCY OFF push-button, lockable
- 2 separated discharge devices for cable and internal surge capacitor
- integrated coupling filter for SIM-MIM application (option)
- return voltage protected high voltage output (option)
- insulation resistance measurement (option)

### Connection and Operation

highest safety and very user-friendly

After connecting the STG to the test object all required settings can be performed on the control panel.



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## Technical Data

	STG 600
Display Selectable languages	backlit, 160 x 80 dot-matrix, LCD (graphics) German, English, French, Dutch, Spanish, Italian other languages on request
<b>Cable Testing</b> Output voltage Max. output current Adjustable timer	0.2 - 5 kV DC (neg.) 300 mA (neg.) 0.5 - 60 min or continuous operation
Identification of short-circuit and breakdown	
<b>Surge Mode</b> Output voltage Max. surge energy Surge sequence	0.2 - 4 kV DC (neg.) 600 Ws (1000 Ws) 20 pulses / min or adjustable setting from 1 - 30 pulses/min; (1 – 20 pulses / min with option 1000 Ws) additionally single pulse or DC output selectable
<b>Sheath Fault Location</b> Output voltage Max. output current Pulse coding for Sheath Fault Location Adjustable timer	0.2 - 5 kV DC (neg.) 700 mA (neg.) 5 pulse code programs selectable 0.5 - 60 min or continuous operation
<b>Option: SIM (Secondary Impulse Method)</b>	HV coupling filter for Echometer IRG 2000, IRG 3000
<b>Option: Insulation resistance measurement</b>	0,1 k OHM ÷ > 100 M OHM
<b>Option: Return voltage protected high voltage output</b>	return voltage protected 0 - 400 V AC in all operating modes
Power supply	220 V - 240 V, 110 - 120 V with external autotransformer, 50 Hz - 60 Hz
Power consumption	max. 800 VA (with option 1000 Ws max. 1200 VA)
Operating conditions: Relative humidity Ambient temperature	≤ 85 %, non-condensing Operation: 0 ° C... + 50 ° C Storage: - 20 ° C... + 60 ° C
Dimensions Weight Length of HV-test lead	19", 6 U, 680 mm depth approx. 44 kg 5 m
Designed and built acc. to following standards  CE conform	Low voltage directive 73 / 23 / EWG, EN 61010 - 1, VDE 0104; EMC directive 89 / 336 / EWG with modification 91 / 263 / EWG, 92 / 31 / EWG VDE 0843 part 2, IEC 801-2 / VDE 0843 part 4, IEC 801-4, VDE 0875 part 11, EN 55 011

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## **Surge and Test Generator STG 600**

### **Delivery includes:**

- Surge and test generator STG 600 without accessories
- Ground line with ground terminal and N connection line, 4 m long
- Protection cover for front panel
- Mains connection cable
- User manual

### **Options:**

- Surge Energy 1000 Ws
- Option package SIM coupling filter, including BNC connection cable and protective ground cable for IRG 2000
- Fixing device for quick fastening of IRG 2000 to STG 600
- Insulation resistance measurement:
- Software "insulation resistance"
- During cable testing additionally the insulation of the test sample is displayed (measuring range 0,1 k $\Omega$  up to > 100 M $\Omega$ )
- Return voltage proof high voltage output  
0 to 400 V ~  
Damage to the STG 600 due to accidentally switched on mains voltage is avoided.

**Recommended additional instruments:**Pre-location of faults:

- Echometer IRG 2000, voltage proof echometer for application of:
  - Pulse Reflection Method
  - Secondary Impulse Method (SIM)
- Pulse Reflection Test Set IRG 300 (alternative to IRG 2000)

Pin-pointing of faults:

- Audio frequency receiver UL 7
- Inductive pick-up for UL 7; for coincidence measurement IP 8
- Audio frequency receiver UL 30 (alternative to UL 7)
- Ground microphone BM 30 (suppresses ambient noise)
- Headphone KH 8 S (suppresses ambient noise)
- Cable Sheath Fault Receiver with ground sticks and connection cable KMF 1

Tracing:

- Locator-Set with UL 7 and powerful audio frequency transmitter TG 20/50
- Locator-Set with UL 30 and powerful audio frequency transmitter TG 20/50

For complete fault location systems, test van installations and special accessories please contact your local BAUR representative.