

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:

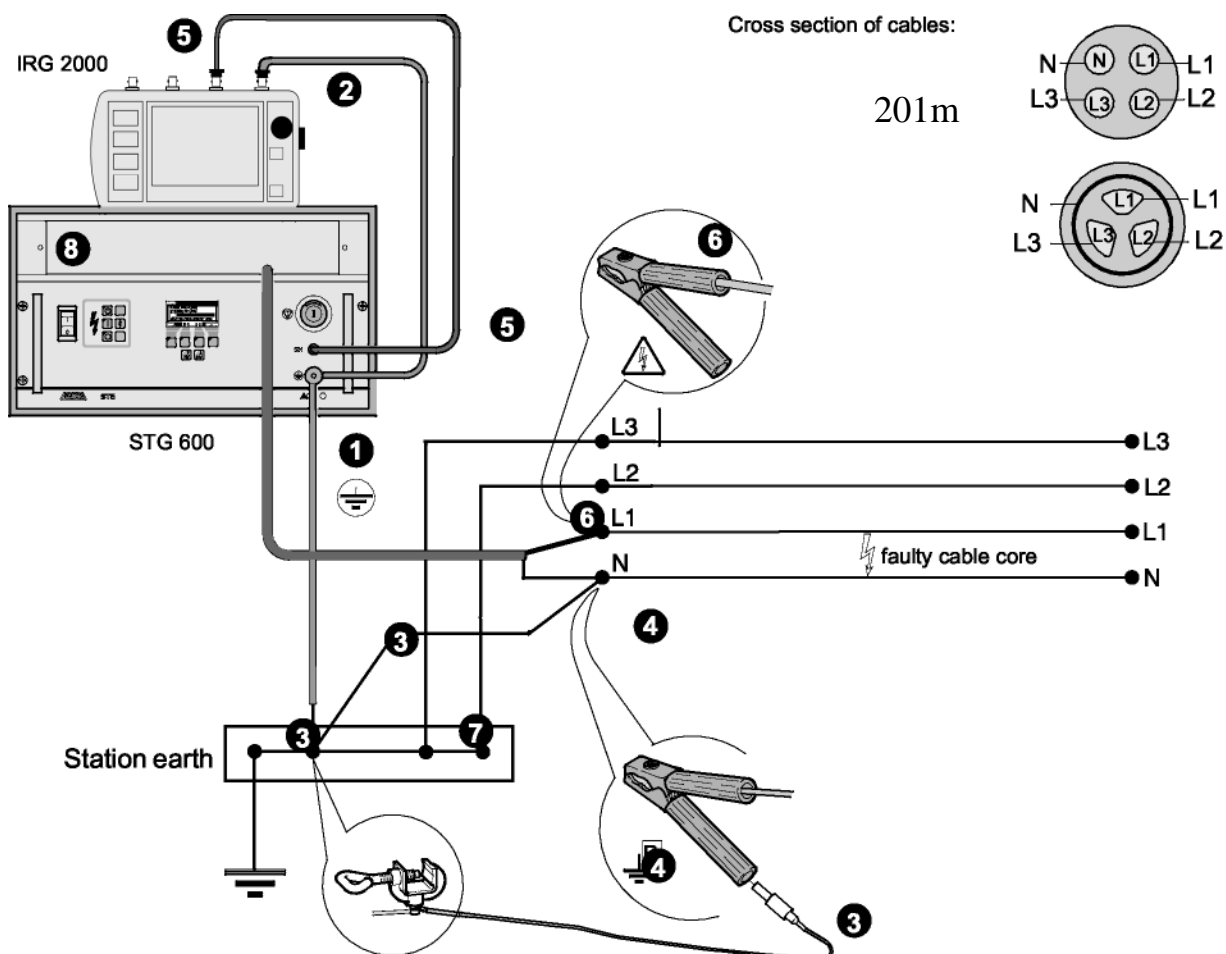
- optimized unique fault location system for low voltage networks
- low weight, portable
- high surge energy 600 Ws (optional 1000 Ws)
- output voltage adjustable in 0.1 kV steps

- 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.



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
Cable Testing 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	
Surge Mode 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
Sheath Fault Location 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
Option: SIM (Secondary Impulse Method)	HV coupling filter for Echometer IRG 2000, IRG 3000
Option: Insulation resistance measurement	0,1 k OHM ÷ > 100 M OHM
Option: Return voltage protected high voltage output	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

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 Ω up to > 100 M Ω)
- Return voltage proof high voltage output 0 to 400 V ~
Damage to the STG 600 due to accidentally switched on mains voltage is avoided.

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

