



Compact High Voltage Surge Generator



SG12.800

• Product Overview

- Generates a High Voltage DC surge voltage suitable for the following methods in combination with optional devices such as:
- 0-12kV / 800 Joules surge energy.
- DC withstand voltage 0-12kV / 0-164mA
- TDR Time Domain Reflectometry (included with all models in the TDR.Series)
- ICM impulse current method. (TDR.750A, TDR.850A & TDR.950A)
- MIM/ARC secondary/multiple impulse method coupling possible with the (TDR.950A only).
- Acoustic pin-pointing with our advanced digital GM.Series universal receiver and accessories set.

Key Features:

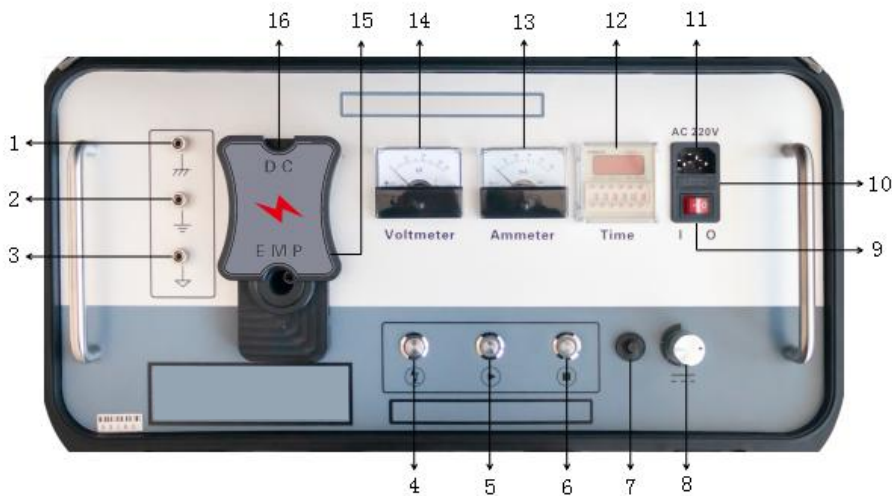
- Integrated design, built in power capacitor to avoid leakage
- High voltage directly connected to the cable under test, easy operating and extremely portable.
- Multiple safety protection built in, Zero voltage starting, Auto discharge when power off.
- Industrial wheeling moulded case for easy transport on site.
- **Multiple working mode's such as:**
 - ✓ Single surge used for Pre-location of the fault distance
 - ✓ Cycle surge used for fault pinpointing
 - ✓ DC Withstand Voltage testing

Standard Accessories:

• High Voltage Surge Generator	x1
• High Voltage test lead	x1
• Power cord	x1
• Ground wire set	x1
• Discharge rod	x1
• 8A Spare Fuses	x5
• User manual	x1
• Factory Conformance certificate	x1
• Warranty Certificate	x1

Technical Specifications:

• Mains supply	220-230 V
• Option:	110-120 / 240 V with external Isolating transformer
• Output Voltage Polarity	Negative Polarity
• Mains frequency	45 Hz to 60 Hz
• Output surge voltage	0~12KV, Continuously variable
• DC Withstand Voltage	Continuous
• Impulse sequence	single-shot pulse or Variable
• Impact power	400W
• Max. surge energy	800J, Energy Capacity 8uF
• Impulse frequency	0-20 Imp/min
• Operating temp	-20 °C to +60°C
• Humidity	5-90%RH
• Elevation	<4500m
• Weight with housing	25 kg
• Dimensions	540mmx400mmx450mm



Panel Function Description:

1. Safety ground: The ground of the instrument shell must be reliably connected to the ground in order to prevent the instrument shell from being electrified or electric shock to personnel.
2. High-voltage ground: Also known as high-voltage tail, it must be grounded reliably to prevent high-voltage leakage and discharge. Poor contact may cause failure to boost the voltage, high voltage breakdown of the internal components of the instrument, and accidents caused by leakage or discharge inside the instrument.
3. Sampling ground: The negative terminal of the pulse energy storage capacitor has a high voltage and must be grounded reliably. It is used for sampling when the waveform is sampled under the high-voltage flashover state of the cable fault tester. (Without high-voltage flashover sampling, reliable grounding is still required).
4. Discharge button: Press this button to make contact with the ball gap, and discharge manually. (The duration of each key press cannot exceed 1s).
5. High voltage start button: When the start button light is on, it means that the voltage output is in the zero position. When the light is on, the start button is valid. If the start button light is not on after turning on the power switch, turn the voltage adjustment knob counterclockwise until the light is on. When the button light is on, press this button to start the device and generate high voltage output.
6. High-voltage stop button: When the test is completed or an abnormality occurs, press this button to cut off the high-voltage output, the high-voltage light goes out, and the internal discharge ball stops working. When the stop key is on, it means there is high voltage output, and when it is off, it means there is no high voltage output.
7. Over-current protection switch: When pressed, it means that the over-current protection function has started; when it is popped up, it means that the instrument has triggered the over-current protection.
8. Voltage adjustment: After turning on the device, you must first turn the knob counterclockwise to the end, press the start button, and then adjust clockwise to increase the output high voltage from small to large, and adjust counterclockwise to reduce the output high voltage from large to small.
9. Power switch: I switch turns on the AC 220V power supply switch, and 0 switch turns off the system power.
10. The fuse holder: the place where the fuse of the AC 220V power supply system is installed.
11. Power socket: the working power supply of the instrument, AC 220V connection port.
12. Time setting: Set the discharge time interval.
13. Ammeter: indication of the current on the high voltage side.
14. Voltmeter: high voltage output voltage indicating kV meter.
15. High-voltage output (EMP): When impacting discharge, connect the high-voltage output line.
16. High voltage output (DC): When DC withstand voltage, connect the high voltage output line.