

# Portable High Voltage Surge Generator



### **General information:**

- Trolley –Type High voltage pulse generator meet the DL/T846-2004 "High Voltage Test equipment general technical conditions" and DL/T474-2006 "field insulation test guide standards".
- Fault conditioning (burning) with current up to 60 mA @ 32kV,120mA@16kV, 240mA@8kV
- Main application is for surge discharging of cable fault testing of LV/HV Cables and also used for DC voltage withstand testing of others electrical device.
- The units is an advanced instrument with an integrated High voltage DC source and energy storage capacitor with a discharge ball discharge device and a cable fault tester.
- The units adopt high precision and stability which is attributed to the high qualified HV electronic components and high frequency & voltage technology.
- · The Surge generator is simple and easy to operate.
- Auto timing between pulses and manual operation for single pulse options included.
- User-friendly operation of the Trolley type DC high-voltage pulse equipment and the ideal device for power cable fault detection on networks ranging from 220V – 33kV.
- Auto Discharge, Over voltage, current & heating protection circuits built in to ensure reliability.
- Ground includes: HV ground, safety ground and continuous sampling ground for optimal safety.

## SG32.1000ST

#### **Product Overview**

Generates a high voltage surge and DC voltage suitable for the following methods in combination with optional devices:

- 0-32kV / 1024 Joules surge energy.
- TDR Time Domain Reflectometry ARC reflection method and Impulse Current Method.
- Acoustic ground fault pin-pointing (with the GM. Series universal receiver and accessories set)
- DC Withstand voltage testing up to 32 kV
- Continuous Mode included.

### **Key Features:**

- · High voltage pulse output is even and controllable.
- With current and voltage 1.5 pointer display, and the surge discharge process is intuitive and clear.
- · High voltage side measurement is real-time and accurate.
- With zero start protection function, and potentiometer return to Zero output function, safe and reliable.
- Three voltage range and capacitors, which is easy to change the voltage as customer's requirement.
- This unique design of high voltage measurement, at stop state, it will auto discharge the capacitor electricity.
- Discharge time with 2 modes: Timing and manual.
- · With DC Withstand voltage test function.
- Internal installation high precision test cable fault sampling waveform module.
- · Easy to move trolley design.

## **Technical Specifications:**

- The surge HV voltage: 0 ~32kv
- · High voltage divider: Voltage Accuracy 1.5 grade
- Inside capacitor :4µF/32kV、16µF/16kV、64µF/8kV
- Surge time: Auto surge ±6s, also can be control by hands.
- Surge energy: 1024J
- Surge power:2KVA
- Size: 750L×530W×890H
- Weight: not more than 120kg
- Power supply: AC 220V + 10% 50Hz/±2Hz
- Environment temperature: -25 ~ +65 °C

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## **Panel Diagram**



- Ammeter: Show the current of low voltage side
- 2. Voltmeter: Show high voltage output; 8kV、16kV、32kV
- 3. Power indicator light: Power indicator is light and AC220V is normal after turn on the power switch.
- High voltage: High voltage output indicator light. Light is on means there has high voltage output. Otherwise, light is off there
  is no high voltage output.
- 5. Zero: it means that the voltage adjustable knob is at the Zero . the Start key is effective if the Zero indicator is brighter only.
- Signal: Use double Q cable connect the DC High Voltage Pulse Generator with cable fault locator, only at high voltage flashover is effective.
- Power switch: AC 220V 50Hz power input socket. Fuse holder and main power switch of device. 8A Fuse. Key lock option available on request.
- 8. Single discharge: The indicator will light when choose single discharge
- 9. Mode select: DC, Single and Cyclic. DC model is to start withstand voltage test( hipot test) o cable. Single model is discharge by hand controlling. Press it and then adjust High voltage knob to control discharge time by hand. Cyclic model is discharged automatically which means select this function to rise up voltage after start high voltage ,this device will be automatic trigger impulse discharge, time is about 4 seconds.
- 10. Start: At the zero state to pull up the start, the high-voltage is start, at the same time the High voltage light is on.
- 11. Stop: when the test is completed or abnormal, press the key to cut off the high voltage output, the start level will automatically fall, this will also automatic discharge remaining high voltage inside the device.
- 12. Voltage Control: This knob is at the zero state, zero indicator is on, high voltage can start. After starting high voltage, it can rise up the voltage by the voltage adjust knob. Please noted, the voltage adjust knob should be adjusted slowly to set up
- 13. Voltage selector: This button has three voltage ranges. 8kV, 16kV, 32kV, Pull the button out and rotate to an appropriate voltage then press down the button When you select a voltage. After that the voltage selection was finished.



# **Packing list**

Name	Qty.	Photo	Name	Qty.	Photo
Host	1		Power cord	1	
HV output line	1		Ground wire	1	OS
Double Q line	1		Sampler	1	
Discharge rod	1		Fuse (8A)	3	€. •

### **Standard Accessories:**

High Voltage Surge Generator
 High Voltage test lead 15 meter
 Power cord 220VAC 15 meter

x1

x1

х3

х1

x1

- Ground wire set 15 meter
- Discharge rod
- 8A Spare Fuses
- User manual
- Factory Conformance certificate
- Warranty Certificate

### **Optional Accessories:**

- 25 meter lead set consisting or 1x HV Lead, Grounding wire set & Power corde
- 30 meter lead set consisting or 1x HV Lead, Grounding wire set & Power corde
- ITE Power Pack / One Inverter 3000W Pure Sine Wave AC/DC Charging system (Model FT-302), 4x 105 aH battery box complete with batteries 1150K Calcium Lead 12V UPS batteries. (Model BB4X105) (Portable box on wheels or mountable)
- ► ITE Power Pack / One Inverter 3000W Pure Sine Wave AC/DC Charging system (Model FT-302), 4x 105 aH battery box complete with batteries 1150K Calcium Lead 12V UPS batteries. (ModelLi100) (Portable box on wheels or mountable)
- ITE Power Pack / One Inverter 5000W Pure Sine Wave AC/DC Charging system (Model FT-502), 4x 105 aH battery box complete with batteries 1150K Calcium Lead 12V UPS batteries. (Model BB4X105) (Portable box on wheels or mountable)
- ITE Power Pack / One Inverter 5000W Pure Sine Wave AC/DC Charging system (Model FT-502), 4x 105 aH battery box complete with batteries 1150K Calcium Lead 12V UPS batteries. (ModelLi100) (Portable box on wheels or mountable)