

## Automatic Lightening Surge Simulator

SG 968G

### Datasheet



#### In Compliance with

- > TIA-968B
- > FCC part 68

#### Introduction

SG-968G automatic lightning surge simulator is based on 3ctest third-generation intelligent multi-functional simulator. With programmable controller and computer technology, it simplifies system constitution and enhances system reliability during high voltage and current test. Color touch screen with good human-machine interface and easy operation makes test easier by only setting parameters on setting page. It is featured with high system integration, easy operation and save time. It can conduct TIA-968B surge test with four internal waveform module.

#### Features

- > Color touch screen 7 inch LCD
- > Automatic control system
- > Intelligent HV mains charging mode
- > Four test waveforms in one, standalone test
- > Contactless discharging switch, no discharging noise
- > Internal automatic single phase CDN
- > 22U standard 19 inch mobile cabinet installation
- > RS232 communication port for remote control

#### Application Areas

- |                 |                      |
|-----------------|----------------------|
| > Communication | > Technology         |
| > Telecom       | > Military           |
| > Medical       | > Avionics           |
| > Broadcast     | > New energy         |
| > Railway       | > Electrical Vehicle |

### 10/160 Combination Wave Parameter

Output voltage	0.25~1.65 Kv $\pm$ 5%
Output current	31~220 A
Output voltage wave	6~10/160~260 $\mu$ s
Output current wave	5~10/160~210 $\mu$ s

### 10/560 Combination Wave Parameter

Output voltage	0.25~0.88 kV $\pm$ 5%
Output current	33.3~115 A
Output voltage wave	6~10/560~860 $\mu$ s
Output current wave	5~10/560~760 $\mu$ s

### 9/720 Combination Wave Parameter

Output voltage	0.25~1.65 kV $\pm$ 5%
Output current	6.25~41.25 A
Output voltage wave	9 $\pm$ 2.7/720 $\pm$ 144 $\mu$ s
Output current wave	5 $\pm$ 1.5/320 $\pm$ 64 $\mu$ s

### 2/10 Combination Wave Parameter

Output voltage	0.25~2.75 kV $\pm$ 5%
Output current	100~1100 A
Output voltage wave	1~2/10~19 $\mu$ s
Output current wave	1~2/10~19 $\mu$ s

### Single Phase CDN Parameters

Decoupling waveform	2/10 $\mu$ s
Decoupling amplitude	Less than 6 kV / 3 kA
Coupling capacitance	18 $\mu$ F
Decoupling inductance	1.5 mH
Coupling mains	Single phase AC 220 V 50 Hz, 20 A
Test mode	Automatic switch

### General Parameter

Output polarity	+/-
Number of discharging	1~999
Interval time	30~999 s
Trigger mode	Automatic or manual, single trigger available
Current measurement	Internal 0.005 V / A current sensor
Power supply	AC 110 V / 220 V, $\pm$ 10%, 50/60 Hz (default AC 220 V)
Temperature	15~35 $^{\circ}$ C
Humidity	45%-75%
Ground resistance	No more than 0.5 $\Omega$
Dimension	19" /22U 600x800x1250 mm
Weight	Approx. 130 kg

### Optional Accessories

Oscilloscope	Tektronix MDO series
Wide-band Current Monitor	CM 0220M
Voltage probe	HILOK VCF-80, 8 kV differential
Signal line CDN	CDN
Test box	PA350



## **SUZHOU 3CTEST ELECTRONIC CO., LTD.**

Add.: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China

Tel: +86 (0)512 6807 7192      Fax: +86-512-68079795

Sales Email: [globalsales@3ctest.cn](mailto:globalsales@3ctest.cn)      Service Email: [service@3ctest.cn](mailto:service@3ctest.cn)

[www.3c-test.com](http://www.3c-test.com)