

Surge Impulse Group Generator

LSE-545CB 【Introduction】



LSE-545CB, is a highly integrated and efficient dual-in-one testing system that combines surge and burst immunity tests. This entire equipment meets the requirements of IEC 61000-4-4 and -5 standards. It not only provides excellent interference performance but also integrates advanced operation and control technologies, bringing a different experience to electromagnetic compatibility testing. also meets the ripple testing requirements of ISO 16750-2, the testing requirements of GB/T 17626.16/19, and the testing requirements of ISO 21498-2. The system is capable of fully automated calibration and testing. An external power amplifier is optional, and the device can also be used standalone.

Compliance Standards

IEC 61000-4-4 Ed.3 、 IEC 61000-4-4 Ed.2 、 EN 61000-4-4 、 GB/T 17626.4 、 IEC 61000-4-5 Ed.3 、 EN 61000-4-5 、 GB/T 17626.5

Application Fields

Industrial Equipment, Electrical Instrumentation, Automotive Electronics, Medical Devices, Lighting Equipment, Communications Equipment, Audio and Video Equipment, Low-Voltage Electrical Apparatus, Electronic Components, Electric Tools, Information Technology Equipment, Instrumentation and Apparatus.

Technical Features

- ◆ A 7" color capacitive touchscreen offers a user-friendly and powerful human-machine interface ;
- ◆ The interface allows for direct and rapid test program creation, enabling intelligent test operation ;
- ◆ It features a built-in self-calibration function with calibration factors, facilitating easy user calibration. ;
- ◆ The communication interface design is comprehensive, with expandable RS485 serial ports in addition to the standard configuration ;

- ◆ Both surge and burst tests utilize high-voltage, high-speed semiconductor switches, capable of generating excellent interference waveforms and characteristics ;
- ◆ The maximum peak test voltages for both surge and burst tests exceed 5 kV, providing sufficient test margins for users ;
- ◆ Its highly integrated design saves test space, allowing users to accomplish all their test needs with a single machine ;
- ◆ Single surge or burst test items can be upgraded as per user requirements

Parameter List

Specification Model	LSE-545CB
Type of Interference	Electrical Fast Transient/Burst Immunity, Surge Immunity
EFT/B Generator	
Output Voltage	0.2 ~ 5 kV (+10%)
Pulse Frequency	Continuously adjustable from 0.1 kHz to 1000 kHz
Pulse Polarity	Positive/Negative/Automatic Alternation between Positive and Negative
Internal Resistance	50 Ω
Pulse Rise Time	5 ns \pm 30%
Pulse Width at 50 Ω	50 ns \pm 30%
Pulse Width at 1k Ω	35 ns ~ 150 ns
Number of Pulses per Burst	1 to 500 pulses
Burst Period	Continuously adjustable from 0.1 s to 60 s
Surge Generator	
Output Voltage	0.2 ~ 5 kV (+10%)
Output Current	0.1 ~ 2.5 kA(+10%)
Surge Polarity	Positive / Negative / Automatic Alternation between Positive and Negative
Output Waveform	Open-circuit Voltage Waveform Front Edge: 1.2 μ s \pm 30% Pulse Width: 50 μ s \pm 20% Short-circuit Current Waveform Front Edge: 8 μ s \pm 20% Pulse Width: 20 μ s \pm 20%
Impedance	2 Ω /12 Ω /42 Ω

Pulse Repetition Period	10 s ~ 600 s (1 s step)
General Parameters	
Angle of Injection	Asynchronous / Synchronous, 0 to 359 degrees, step value of 1 degree
Test Function	Programmable injection of interference at any phase, built-in IEC test levels, voltage step test
Coupling/Decoupling Network	Built-in, single-phase three-wire, AC 264 V/16 A, DC 370 V/16 A
Display Interface	Android-based color touchscreen
Operating Power Supply	AC 85 V ~ 264 V 50/60 Hz 120 W
Dimensions	19"/4 U
Weight	20 kg

Type Selection

Name	Specification	IEC61000-4-4	IEC61000-4-5
Combined Surge and Burst Generator	LSE-545CB	√	√
Generator	LSE-545CB-B	√	
Burst Generator	LSE-545CB-S		√

Contact US



TEL: +886-7-350-1899
FAX: +886-7-348-8599
E-mail: bill@atti-tw.com



11F.-2, No. 2, Bo'ai 4th Rd., Zuoying Dist.,
Kaohsiung City 81369, Taiwan (R.O.C.)