



# Impulse Current Simulator

## LSG 4606

- SAE ARP5416A
- DO160G S22
- SAE ARP5412A

### Features

- > 10.1 inches TFT touch screen;
- > Max. test current 8 kA;
- > Remote control via control unit;
- > Fiber optic communication, reliable and stable.

### Introduction

When an aircraft is flying in severe convection environment, it will be frequently affected by lightning stroke, which will generate transient induced current on circuits and cables of airborne equipment, such phenomenon is called indirect lightning effect. It may make the aircraft get out of control, even bring about fuselage fire and other serious accidents. For safety reasons, the airborne equipment must be designed properly and tested completely to ensure the system and equipment with critical safety function to perform normally and its flight security when the aircraft is influenced by lightning stroke.

The Impulse Current Generator LSG 4606 system is designed to simulate indirect current of lightning stroke in compliance with SAE ARP5416A chapter 6.1.6 and RTCA DO160 section 22, it generates 6.4/69  $\mu$ s current impulses up to 8000A.

The system is composed of control unit (HVCN 2000) and generator (LSG 4606), which allows operators to conduct testing remotely and ensure the personnel safety.

### Application Areas



## Technical Parameters

Test Current Range	200 A $\leq$ I $\leq$ 8000 A (source port short circuit test) 60 A $<$ I $\leq$ 2500 A (with a load of 20 $\mu$ H+5 $\Omega$ , without assessing rise time and pulse width) 2500 A $<$ I $\leq$ 6000 A (with a load of 20 $\mu$ H, without assessing rise time and pulse width)
Test Voltage Range	400 V- 19000 V
Rise Time (0%-100%)	6.4 $\mu$ s $\pm$ 20%
Pulse Width (0%-50%)	69 $\mu$ s $\pm$ 20%
Polarity	Positive, negative, first positive and then negative
Test interval	1 s -99 s (the shortest time depends on the test voltage)
Number of Tests	1 - 999
Trigger Mode	Automatic

## General Parameters

Display Screen	10.1 inches TFT touch screen
Working Voltage	220V( $\pm$ 10%), 50 Hz /60 Hz
Fuse	10A
Power Consumption	1500 W
Communication Mode	Fiber Optic
Ground Connection Mode	Flat grounded cable
Dimension	HVCM 2000: 550*280*450 mm LSG 4606: 600*950*1250 mm
Weight	About 16 kg (HVCM 2000) / About 220 kg (LSG 4606)
Environmental Scope	15°C - 35°C
Pressure Range	86 kPa - 106 kPa
Humidity Range	45% - 75%

## Standard Accessories

Test Line, Power Line, Grounding Wire, Fuse (spare parts), Instruction Manual, Factory Report.

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