



# Handheld Electrostatic Discharge Simulator

## EDS 16H

- IEC 61000-4-2:2008
- IEC/EN 61000-6-2
- IEC/EN 61000-6-1
- IEC/EN 61326
- IEC 61340-3-1
- GB/T 17626.2-2018
- Bellcore GR-1089-Core
- ITU-T K.20
- ISO 14304

### Features

- > Ergonomic design;
- > LCD touch screen control;
- > All-in-one design (no base unit);
- > Automatic polarity switching;
- > Built-in standard test library;
- > Intelligent detection of the failure of air discharge;
- > Temperature and humidity monitoring;
- > Changeable R/C networks;
- > Long battery life for continuous tests.

### Introduction

Electrostatic discharge between human body and a metal object or between metal objects can reach up to thousands of volts, which may cause malfunctions or damages to connected electrical equipment and devices. EDS 16H is an advanced intelligent electrostatic discharge generator and a handheld electrostatic discharge simulator independently developed and produced. It is designed according to IEC 61000-4-2:2008 with ergonomic design, integration design, battery powered and mains powered via an adaptor. It boasts easy touch screen operation, safe operation with temperature and humidity monitoring, and stable operation suitable from different testing occasions.

### Application Areas








## Technical Parameters

Contact Discharge	1000 V ~ 16500 V, +/-5%
Air Discharge	1000 V ~ 16500 V, +/-5%
Voltage Step	100 V
Holding Time	> 5 s
Charge Resistor	51 M $\Omega$
Polarity	+/-
RC Module	LCD display
Temperature And Humidity	Built-in thermo-hygrometer with record and protection function
Pulse Repetition Rate	single/0.1/0.2/0.5/1/2/5/10/20 Hz
Trigger Mode	manual& auto
Pulse Counter	1 ~ 9999
Discharge Module	150 pF / 330 $\Omega$
Rising Time	0.8 ns $\pm$ 25 %
Evaluate Procedure	Contact discharge test at 20 Hz, evaluate the test points of DUT
Quick Start Test Program	Simple and easy to reset data online
Standard Test Procedure	accord with IEC 61000-4-2:2008








## General Parameters

Weight	Approx.8.5 kg
Weight (EDS Gun)	Approx.1.8 kg
Environment Temperature	15°C ~ 35°C (operating conditions)
Air Pressure	86 kPa ~ 106 kPa
Relative Humidity	30% ~ 60% (operating conditions)
Working Power Supply	100 V ~ 240 V ( $\pm$ 10%) ; 50/60 Hz (default AC 220 V 50 Hz for China Mainland)

## Standard Equipped

1. Power Adapter EDS 20H-ACDC 	Used as a substitute for rechargeable batteries during continuous testing
2. Battery Charging Module EDS 20H-BATC 	6 * 2600 mAh Ni MH rechargeable battery
3. Resistance Capacitance Module EDS 20H-RC 	150 pF / 330 $\Omega$ ;
4. Discharge Electrode EDS 20H-CONT 	Contact discharge gun head
5. Discharge Electrode EDS 20H-AIR 	Air discharge gun head
6. Grounding Wire	2 m
7. Package	Carrying case
8. Documents	Factory calibration report and user manual

## Optional ACCessories

1.RC Module 	100 pF/1500 ohm (EDS)    500 pF/100 ohm (EDS) 150 pF/150 ohm (EDS)    150 pF/2000 ohm (EDS) 330 pF/330 ohm (EDS)    330 pF/2000 ohm (EDS) 500 pF/500 ohm (EDS)    500 pF/5000 ohm (EDS) 200 pF/0 ohm (EDS)    500 pF/0 ohm (EDS) Customization is available for RC module.
2.30 mm Air Discharge Tip EDS 20H-CONT 	150 pF/330 ohm, fast relay discharge module, rise time 200 ps -300 ps
3.Electrostatic Discharge Test Setup 	Grounding high voltage resistor: 2x470 kohm Vertical coupling plane: 500 x 500 x 3 mm Horizontal coupling plane: 1600 x 800 mm Grounding reference plane: 2700 x 1800 mm Test table: 1600 x800 x 800 mm, fully wooden As per IEC 61000-4-2
4.ESD Calibration Set EDS-CALA 	Used for waveform calibration as per IEC / EN61000-4-2, including 2 $\Omega$ target / 4 GHz, coaxial cable, user manual
5.Attenuator JZ602 	Impedance: 50 $\Omega$ Attenuation: 20 dB
6. Attenuator JZ603 	Impedance: 50 $\Omega$ Attenuation: 30 dB
7.EDS REMOTE 	Realize the remote control function of the upper computer software to the instrument
8.PC Software Corelab	> Compatible with Windows 7, Windows 8 and Windows 10 operating systems; > Support Ethernet interface and serial interface communication mode; >Support scheduling testing, test sequence parameters and the key test, the operation is simple > Can be set up customer information, automatic generation of test reports, and support the export of test report, the convenient user record data in real time;

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