



# Electrostatic Discharge Simulator

## EDS 30V

- IEC/EN 61000-4-2
- ISO 10605
- GB/T 17626.2
- GB/T 19951

### Features

- > Ergonomic design;
- > LCD touchscreen control;
- > Temperature and humidity recording and protection;
- > Automatic polarity switching;
- > Replaceable discharge module with automatic identification;
- > Built-in standard test program library;
- > Intelligent detection of air discharge failure;
- > Max. test voltage 30 kV;

### Introduction

The EDS 30V is an intelligent electrostatic discharge (ESD) generator designed to meet the IEC 61000-4-2 testing standard, accurately simulating electrostatic discharge pulse up to 30kV.

The EDS 30V features an LCD touch screen for simple and easy operation. The power supply can be selected between AC and a battery pack, and a built-in thermo-hygrometer ensures reliability across a wide range of testing environments.

### Application Areas



## Technical Parameters

|                          |                                                                      |
|--------------------------|----------------------------------------------------------------------|
| Contact Discharge        | 1,000 V ~ 30,000 V (±5%)                                             |
| Air Discharge            | 1,000 V ~ 30,000 V (±5%)                                             |
| Voltage Step             | 100 V                                                                |
| Holding Time             | > 5 s                                                                |
| Charging Resistor        | 51 MΩ                                                                |
| Polarity                 | +, -                                                                 |
| RC Module Identification | Automatic identification and LCD display                             |
| Temperature and Humidity | Built-in thermo-hygrometer with record and protection functions      |
| Frequency                | Single, 0.1 Hz, 0.2 Hz, 0.5 Hz, 1 Hz, 2 Hz, 5 Hz, 10 Hz and 20 Hz    |
| Trigger Mode             | Automatic, manual                                                    |
| Counter                  | 1~9,999                                                              |
| Contact Discharge Mode   | 330 pF/ 2,000 Ω<br>150 pF/ 2,000 Ω<br>330 pF/ 330 Ω<br>150 pF/ 330 Ω |
| Rise Time                | 0.7 ~ 1 ns                                                           |

## General Parameters

|                        |                                 |
|------------------------|---------------------------------|
| Weight                 | Approx. 12 kg                   |
| Weight (ESD Gun)       | Approx. 2.0 kg                  |
| Operation Power Supply | 100 V ~ 240 V (±10%); 50/ 60 Hz |
| Ambient Temperature    | 5°C ~ 40°C                      |
| Relative Humidity      | 20% ~ 80%                       |
| Atmospheric Pressure   | 86 kPa ~ 106 kPa                |

## Standard Accessories

|   |                        |                                                                |                                                                                       |
|---|------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 | Discharge Gun          | Discharge gun with control *1                                  |  |
| 2 | High Voltage Generator | Programmable high-voltage power supply *1                      |  |
| 3 | RC Module              | 330 pF/ 2,000 Ω, 150 pF/ 2,000 Ω<br>330pF/ 330 Ω, 150pF/ 330 Ω |  |
| 4 | Discharge Tip          | Model: EDS 20H-CONT<br>Contact discharge tip                   |  |
| 5 | Discharge Tip          | Model: EDS 30T-AIR<br>Air discharge tip                        |  |
| 6 | Grounding Cable        | 2 m                                                            |                                                                                       |
| 7 | Package                | Carrying case                                                  |                                                                                       |
| 8 | Factory Report         |                                                                |  |
| 9 | User Manual            |                                                                |                                                                                       |

## Optional Accessories

|   |                                    |                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                       |
|---|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 | RC Module                          | 100 pF/1,500 $\Omega$ (EDS)<br>150 pF/150 $\Omega$ (EDS)<br>500 pF/500 $\Omega$ (EDS)<br>500 pF/5,000 $\Omega$ (EDS)<br>200 pF/0 $\Omega$ (EDS)<br>500 pF/0 $\Omega$ (EDS)<br>500 pF/100 $\Omega$ (EDS)<br>Can be customized upon request                                                                                                                                                            |    |
| 2 | Discharge Tip                      | Model: EDS 30T-AIR (30mm)<br>For tests from 15 kV to 30 kV                                                                                                                                                                                                                                                                                                                                           |    |
| 3 | Battery Pack                       | 8 * 2600 mAh Ni-MH rechargeable batteries alternative to AC power<br>Operating time: 8h (30 kV, 1 Hz)<br>Dimension:<br>140 mm x 100 mm x 35 mm<br>Weight: 0.5 kg                                                                                                                                                                                                                                     |    |
| 4 | Battery Charger                    | Model: ACS310<br>For charging battery pack                                                                                                                                                                                                                                                                                                                                                           |    |
| 5 | Electrostatic Discharge Test Setup | Model: ESDD<br>Grounding high voltage resistor:<br>2 * 470 k $\Omega$<br>VCP: 500 * 500 mm<br>HCP: 1,600 * 800 mm<br>GRP: 2,700 * 1,800 mm<br>Standard: IEC 61000-4-2                                                                                                                                                                                                                                |   |
| 6 | ESD Calibration Kit                | Model: EDS CALA<br>Used for waveform calibration of IEC / EN 61000-4-2, including 2 $\Omega$ target / 4 GHz coaxial cable, user manual                                                                                                                                                                                                                                                               |  |
| 4 | Attenuator                         | Model: JZ602<br>Impedance: 50 $\Omega$<br>Attenuation: 20 dB                                                                                                                                                                                                                                                                                                                                         |  |
| 5 | Attenuator                         | Model: JZ603<br>Impedance: 50 $\Omega$<br>Attenuation: 30 dB                                                                                                                                                                                                                                                                                                                                         |  |
| 6 | PC Communication                   | Model: EDS - REMOTE<br>Supply with fiber optic cable (Model: HFBR4503-4513, length 10 m)                                                                                                                                                                                                                                                                                                             |  |
| 7 | PC software                        | Model: CoreLab<br>> Compatible with Windows 7/8/10 operating systems<br>> Supports Ethernet and serial communication modes<br>> Supports parameter scheduling, test sequences, and one-click testing for easy operation<br>> Allows configuration of customer information, automatically generates test reports, and supports report export, making it convenient for users to record real-time data |  |

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