



Electrostatic Discharge Simulator

EDS 30V

- ISO 10605
- IEC 61000-4-2
- IEC 61000-6-1
- IEC 61000-6-2
- IEC 61326
- ITU-T K.20
- Bellcore GR-1089-Core
- RTCA DO-160 Section 25
- MIL-STD-461G CS118
- GB/T 19951
- GB/T 17626.2

Features

- > Ergonomic design
- > LCD touchscreen control
- > Temperature and humidity recording and protection
- > Automatic polarity switching
- > Replaceable RC 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 complies with international automotive electronic standards such as ISO 10605, while also supporting general electrostatic discharge test standards such as IEC 61000-4-2. The simulator can accurately simulate and generate discharge pulses with an output voltage of up to 30 kV.

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	200 V ~ 30,000 V (±5%)
Air Discharge	200 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 150 pF/ 2,000 Ω 330 pF/ 330 Ω 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	RC Module	Model: EDS 30T-RC(150pF/ 330 Ω) Model: 330 pF/ 2,000 Ω (EDS) Model: 150 pF/ 2,000 Ω(EDS) Model: 330pF/ 330 Ω(EDS)	
2	Discharge Tip	Model: EDS 20H-CONT (330 Ω) Contact discharge tip	
3	Discharge Tip	Model: EDS 20H-CONT (2,000 Ω) Contact discharge tip	
4	Discharge Tip	Model: EDS 30T-AIR (V2.0) Air discharge tip	
5	Grounding Cable	2 m	
6	Package	Carrying case	
7	Factory Report		
8	User Manual		

Optional Accessories

1	RC Module	100 pF/1,500 Ω (EDS) 150 pF/150 Ω (EDS) 500 pF/500 Ω (EDS) 500 pF/5,000 Ω (EDS) 200 pF/0 Ω (EDS) 500 pF/0 Ω (EDS) 500 pF/100 Ω (EDS) Customizable RC modules according to user needs	
2	Discharge Tip	Model: EDS 30T-AIR (30 mm) For tests from 15 kV to 30 kV	
3	Battery Pack	Model: EDS01 8 * 2,600 mAh Ni-MH rechargeable batteries alternative to AC power Operating time: 8h (+30 kV, 1 Hz) Dimension: 140 * 100 * 35 mm Weight: 0.5 kg	
4	Battery Charger	Model: ACS310 For charging battery pack	
5	PC Communication	Model: EDS-REMOTE Fiber optic to USB converter	
6	Optical Fiber	Model: HFBR4503-4513 Used together with the EDS-REMOTE to enable remote control of the instrument through host computer software. Cable length: 10 m.	
7	Electrostatic Discharge Test Setup	Model: ESDD VCP (ESD-DZ): 500*500*3 mm HCP (ESD-DZ): 1,600*800*2 mm GRP (ESD-CD): 2,700*1,800*2 mm Insulating Mat: 1,600 *800 *0.5 mm Discharge cable: ES 470-1.4 (1.4 m) ES 470-1.7 (1.7 m)	
8	ESD Calibration Fixture	Model: ESDD-B Note: Complies with the requirements of ISO 10605:2023.	
9	ESD Calibration Fixture	Model: ESDD-D Note: Complies with the requirements of IEC 61000-4-2:2025.	
10	Calibration Kit	Model: ESD-CALA Used for waveform calibration of ISO 10605, IEC 61000-4-2, including 2 Ω target / 1 m coaxial cable	
11	Electrostatic Dissipative Mat	Model: ESD-DM Surface Resistance: 10^8 Ω /square Dimensions: 1,000 *1,000 * 2.5 mm	
12	Insulating Pad	Dimensions: 2,000 *1,000 * 2 mm	

Optional Accessories

13	Attenuator	Model: JZ602 Impedance: 50 Ω Attenuation: 20 dB	
14	Attenuator	Model: JZ603 Impedance: 50 Ω Attenuation: 30 dB	
15	High Voltage Divider	Model: EDS-HVM30 Used to measure the output voltage parameters of the electrostatic discharge simulator in air discharge mode. Max. test voltage: 30 kV Impedance: 20 G Ω // 3 pF Attenuation Ratio: 20651:1 (Reference Value)	
16	PC Software	Model: Corelab > Compatible with Windows 7/8/10 operating systems. > Supports Ethernet interface and serial communication modes. > Supports parameter scheduling tests and test sequences, allowing one-click test execution with simple operation. > Allows customer information configuration, automatically generates test reports, and supports report export for convenient recording of real-time test data.	

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