



Electrostatic Discharge Simulator

EDS MAX30

- ISO 10605:2023
- GB/T 19951:2019
- IEC 61000-4-2:2025
- GB/T 17626.2:2018

Features

- > 3.5-inch color touch screen operation
- > The maximum test voltage can reach 30 kV
- > Ergonomic design and UI design
- > The discharge module can be replaced and automatically recognized
- > Compatible with AC/DC (battery) power supply
- > Support remote control through fiber optic communication
- > Built in 3 testing modes: standard testing, scheduled testing, and simple testing

Introduction

The human body can sometimes generate voltages of up to tens of thousands of volts from static electricity on objects or between two objects, which can cause electrical and electronic equipment circuits to malfunction or even damage. EDS MAX30 is a state-of-the-art intelligent electrostatic discharge generator with an output voltage of 30 kV. It is an electrostatic discharge simulator that integrates discharge gun head and touch screen control, and operates in accordance with ISO 10605 and GB/T 19951 standards. The EDS MAX30 is developed and designed based on our company's fourth generation platform. It has a small size, light weight, and a 3.5-inch color touch screen that is easy to operate. The power supply can choose AC or built-in battery, the RC module can be replaced, and the built-in temperature and humidity meter ensures reliability in various testing scenarios.

Application Areas



Technical Parameters

Parameters of Electrostatic Gun	
Compliant With Standards	GB/T 19951:2019、ISO 10605:2023 IEC 61000-4-2:2025、GB/T 17626.2:2018
Voltage Range	0.2 kV ~ 30 kV(± 5%)
Voltage Resolution	100 V step
Polarity	Positive/Negative/ alternate
Maintain Time	5 s ~10 s
Discharge Electrode	Air discharge round head/contact discharge pointed head
RC Module	150 pF/330 ohm
RC Module Recognition	Automatically recognize and display numerical values
Control Mode	Touch screen, trigger button, fiber optic remote control
Repetition Frequency	Single, 0.1 Hz, 0.2 Hz, 0.5 Hz, 1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 Hz
Trigger Method	Automatic and manual
Pulse Counter	1 ~ 9999
Scheduling Test	Up to 4 scheduling levels, tested in sequence
TDC Counting Function	Count once when the voltage of the gun head is below the set voltage threshold
Self Inspection	Before use, the self check function can be used to automatically verify
Temperature and Humidity	Built in temperature and humidity meter, can be used for environmental recording and instrument protection
Battery Pack Parameters(Optional Accessories Battery Pack TST231 - 3S1P)	
Battery Type	Lithium battery
Module Voltage	11.1 V
Capacity	27 Wh
Battery Life	Contact discharge 8 kV, 1 Hz, alternate , about 6 hours Contact discharge 30 kV, 1 Hz, alternate, about 4 hours
Battery Charging Time	About 4 hours, fully charged automatic protection
Cycle Life	Charging and discharging times 300 times>80% battery capacity

General Parameters

Display	3.5-inch color screen
Scope of Working Power Supply	100 V ~ 240 V($\pm 10\%$) 50/60 Hz
Language	Chinese and English
Brightness Setting	0 ~ 100% brightness setting
Screen off Setting	Automatically turn off screen without operation: 5 min/10 min/15 min/30 min/never
Record Logs	Record the last 4 sets of experimental parameters
Communication Method	Fiber optic communication
Instrument Grounding Connection Method	4 mm banana socket
Host Size	207 mm (W) *160 mm (H) *310 mm (D)
Instrument Weight	About 7.35 kg (including guns)
Ambient Temperature	5°C ~ 40°C
Relative Humidity	20% ~ 80% ,RH(no condensation)
Atmospheric Pressure	86 kPa ~ 106 kPa

Standard Accessories

1	RC resistance Capacitance Module 150 pF / 330 ohm	Model:30C150R330	
2	Gun Head Module	Model:EDS MAX30 - TM330	
3	Air Discharge Gun Head	Model:EDS MAX20 - AirTip	
4	Contact Discharge Gun Head	Model:EDS MAX20 - ConTip	
5	Electrostatic Ggun Instrument Box	Model: EDSMAX30-00 V1.0	
6	Discharge Return Route	Model:CSX210GX2.5HJ,2 pieces	
7	Factory Report	1 copy	
8	Operation Manual	1 copy	

Optional
Accessories

1	Resistance Capacitance Module		
	50 pF / 100 ohm	Model:30C50R100	
	100 pF / 1500 ohm	Model:30C100R1500	
	150 pF / 150 ohm	Model:30C150R150	
	150 pF / 2000 ohm	Model:30C150R2000	
	200 pF / 0 ohm	Model:30C200R0	
	250 pF / 0 ohm	Model:30C250R0	
	330 pF / 330 ohm	Model:30C330R330	
	330 pF / 2000 ohm	Model:30C330R2000	
	500 pF / 100 ohm	Model:30C500R100	
	500 pF / 500 ohm	Model:30C500R500	
	500 pF / 5000 ohm	Model:30C500R5000	
2	Air Discharge Tip 30 mm	Model: EDS MAX30-AirTip 30 mm	
3	Gun Head Module	Model:EDS MAX30 – TM2000	
4	Battery Pack	Model:TST231–3S1P Can provide power to the host without an external power source	
5	Calibration Device	Model:ESD-CALA Used for waveform calibration of IEC/EN61000-4-2, including 2 Ω target/4GHz, coaxial cable	
6	Static Discharge Test Configuration	Model:ESDD Vertical coupling plate 500 mm * 500 mm * 3 mm (Model: ESD-DZ) Horizontal coupling plate 1600 mm * 800 mm * 2 mm (model: ESD-CZ) Reference grounding plate 2700 mm * 1800 mm * 2 mm (model: ESD-CD) Test table 1600 mm * 800 mm * 800 mm, all solid wood Grounding high-voltage resistor 470 k Ω * 2 (model: ES470)	
7	Attenuator	Model:JZ602 Impedance: 50 Ω Attenuation: 20 dB	
8	Attenuator	Model:JZ603 Impedance: 50 Ω Attenuation: 30 dB	

Optional Accessories	9	PC Communication	Model:EDS REMOTE Implement remote control function of the upper computer software for the Instrument	
	10	Immunity Testing Software	Model:CoreLab Compatible with Windows 7/8/10/11 operating systems. Supports Ethernet interface and serial communication mode. Support parameter scheduling testing, testing sequences, one click testing, easy operation. Customer information can be set, test reports can be automatically generated, and export of test reports is supported, making it convenient for users to record real-time data.	
	11	Static Dissipation Pad	Model:ESD-DM Impedance:10 ⁸ kΩ/cm ² Size:1000 mm*1000 mm*2.5 mm	
	12	Insulating Pad	Size:2000 mm*1000 mm*2 mm Meet the requirements of IEC 61000-4-2	

SUZHOU 3C TEST ELECTRONIC CO., LTD.

Address: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China
 E-mail: globalsales@3ctest.cn
 Service: service@3ctest.cn
 Tel: + 86 - 512 - 68077192
 Web: www.3c-test.com



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