



Electrostatic Discharge Simulator

EDS MAX20

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

Features

- > 3.5" HD color screen;
- > Test voltage 20 kV;
- > 1.25 kg weight (incl. battery);
- > Exquisite ergonomic design and UI design;
- > Built-in 3 test modes: standard test, sequence test and easy test;
- > Changeable discharge tip;
- > Support remote control via optical fiber communication;
- > Up to 18 working hours for rechargeable battery.



Introduction

The EDS MAX20 is 3CTEST's fourth-generation electrostatic discharge simulator in compliance with IEC 61000-4-2:2025 and other standards. This new product has a test voltage up to 20 kV and features 3.5-inch high-definition color screen, along with compact mechanical design, intuitive UI design, lightweight, and impeccable waveforms

With three test modes designed in this equipment, the EDS MAX20 offers customers convenient operation tailored to their specific testing requirement, catering not only to research and development stage but also to quality check stage.

Application Areas



Technical Parameters

Test Voltage	0.5 kV ~ 20 kV (± 5%)
Voltage Step	100 V
Polarity	+, -, +/-
Holding Time	5 s ~ 10 s
Discharge Tip	Air discharge tip and contact discharge tip
RC module	150 pF / 330 ohm
RC Module Identification	Automatic Identification and display
Control Mode	Touch screen, trigger button, optical fiber remote control
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, remote
Counter	1 ~ 9, 999
Sequence Test	Up to 4 sequence levels
Counter	Counting happens upon tips voltage lowered than setting voltage thresholds
Voltage Thresholds	50%, 60%, 70%, 80%, 90%
Temperature and Humidity	Built-in temperature and humidity meter, serving as real-time test environment record and protection function.
Battery Parameters	
Battery Type	Lithium battery
Battery Group Voltage	3*3.7 V
Battery Capacity	27 Wh
Battery Life	12h @ contact discharge 20 kV, 1 Hz, first positive and then negative 18h @ contact discharge 8 kV, 1Hz, first positive and then negative
Power Supply for Battery Charger	100 V ~ 240 V, 50 Hz ~ 60 Hz
Battery Charge Time	Approx. 5 h
Service Life	300 times > 80%


General Parameters

Display Screen	3.5 inches color screen
Language	English, Chinese
Auto Power OFF Function	Power off automatically upon no operations: 5 min / 10 min / 15 min / 30 min / never
Screen Brightness	0 ~ 100%
Lock Screen	Lock screen upon no operation: 5 min / 10 min / 15 min / 30 min / never
Memory	latest 4 groups testing parameters
Communication mode	Optical fiber
Grounded Port	4 mm banana plug
Dimension	285 mm × 85 mm × 245 mm
Weight	Approx. 1.25 kg (Incl. battery)
Ambient Temperature	5°C ~ 40°C
Relative Humidity	20% ~ 80% (no condensation)
Atmospheric Pressure	86 kPa ~ 106 kPa

Standard Accessories

1	RC module 150 pF / 330 ohm	Model: 20C150R330	
2	Insulated casing gun head module	Model: EDS MAX20 - TM330	
3	Air discharge tip	Model: EDS MAX20 - AirTip	
4	Contact discharge tip	Model: EDS MAX20 - ConTip	
5	Lituium Battery packs Quantity: 2	Model: TST231 - 3S1P	
6	Battery charger	Model: FY1300800	
7	Base support	Model: EDS MAX20-BASE	
8	Electrostatic suitcase	Size: 420 mm × 350 mm × 185 mm Weight: 5.3 kg (incl. device)	
9	Grounding cable	Model: CSX210GX2.5HJ	
10	Factory report		
11	User Manual		

Optional Accessories

1	RC module	Model	
	150 pF / 2000 ohm	20C150R2000	
	330 pF / 2000 ohm	20C330R2000	
	330 pF / 330 ohm	20C330R330	
	100 pF / 500 ohm	20C100R500	
	150 pF / 150 ohm	20C150R150	
	500 pF / 500 ohm	20C500R500	
	500 pF / 5000 ohm	20C500R5000	
	200 pF / 0 ohm	20C200R0	
	500 pF / 0 ohm	20C500R0	
	500 pF / 100 ohm	20C500R100	
Customizable discharge modules according to user needs			

Optional Accessories

2	Adapter	Model: EDS MAX20-DCPower AC 110/220 V input, can replace battery pack	
3	Adapter Box	Model: EDS MAX20-ADBOX	
4	Electrostatic discharge test configuration	Model: ESDD Following items can be purchased seperately: Vertical coupling plate: 500*500*3 mm (model: ESD-DZ) Grounding high voltage resistance: 2*470 kohm (model: ES470)	
5	ESD calibration device	Model: ESD-CALA Used for waveform calibration of IEC/EN 61000-4-2, including 2 ohm target/4 GHz, coaxial cable, user manual	
6	Attenuator	Model: JZ602 Impedance: 50 ohm Attenuation: 20 dB	
7	Attenuator	Model: JZ603 Impedance: 50 ohm Attenuation: 30 dB	
8	Control software	Model: CoreLab For remote control With test sequence and test report generation functions etc.	
9	EDS MAX 20-PC communication	Model: EDS MAX 20-REMOTE Fiber optic to USB converter	

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