



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 20kV 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 ($\pm 5\%$)
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, 0.1Hz, 0.2Hz, 0.5Hz, 1Hz, 2Hz, 5Hz, 10Hz and 20Hz
Trigger Mode	Automatic, manual, remote
Counter	1 - 9999
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	100 V - 240 V, 50 - 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	4mm banana plug
Dimension	285 mm × 85 mm × 245 mm
Weight	Approx. 1.25kg (Incl. battery)
Ambient Temperature	15 °C - 35 °C
Relative Humidity	30% - 75% (no condensation)
Atmospheric Pressure	86 kPa - 106 kPa





Standard

1	RC module 150pF / 330ohm	Model: C150R330	
2	Insulated casing gun head module	Model: EDS MAX20 - TM2000	
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	
9	Grounding line	Model:CSX210GX2.5HJ	
10	Factory report		
11	User Manual		

Optional Accessories

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

Optional Accessories

2	AC Adapter	Model: EDS MAX20-DCPower AC 110/220 V input, can replace battery pack power supply	
3	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)	
4	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	
5	Attenuator	Model: JZ602 Impedance: 50 ohm Attenuation: 20 dB	
6	Attenuator	Model: JZ603 Impedance: 50 ohm Attenuation: 30 dB	
7	Control software	Model: CoreLab For remote control With test sequence and test report generation functions etc.	
8	PC communication	Model: EDS REMOTE Fiber optic to USB converter	

SUZHOU3CTEST ELECTRONIC CO., LTD

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

