

EDS 30T

Electrostatic Discharge Simulator

The Third
Generation



ESD

Overall unit

EDS 30T

30kV electrostatic
discharge simulator



Front panel

Operating mode

LCD touch screen

R/C module (back side)

Optical interface

Discharging electrode

Multifunctional trigger

Temperature & humidity sensor



HV output

Rear panel



General Description

The EDS 30T is a state of the art electrostatic discharge simulator available in 30kV. It is the most ergonomic ESD gun without an additional base control unit, as per EN/IEC 61000-4-2. The easy to use touch screen, ergonomic design, modular R/C units, remote control software, built-in temperature and humidity sensor allows a trouble-free use in all types of test sites.

Features:

- Ergonomic design
- LCD touch screen
- All-in-one design (no base unit)
- Temperature and humidity monitoring
- Automatic polarity switching
- Changeable R/C module
- Redefined tests according to standards
- Self-detection of air discharge failure

As per:

Bellcore GR-1089-Core

IEC/EN 61326

IEC/EN 61000-6-1&-6-2

IEC 61340-3-1

IEC 61000-4-2

IEC 61326

ISO 14304

ISO 10605

ITU-TK.20

GB/T 17626.2

Technical Data

Contact discharge	1000V - 30, 000V +/-5%
Air discharge	1000V - 30, 000V +/-5%
Resolution	100V
Hold time	> 5 s
Polarity	Positive, negative, alternative
RC module	LCD display
Temperature & Humidity	Integrated sensor to monitor temperature and humidity
Trigger	
Repetition frequency	Single/0.1/0.2/0.5/1/2/5/10/20 Hz
Trigger mode	Manual/automatic
Counter	1- 9999
Software trigger mode	Controlled by PC via fiber optic interface

Technical Data

Output	
Contact discharge	As per EN/IEC 61000 - 4 - 2
Pulse	150 pF / 330 ohm
Rise time	0. 8 ns +/-25%
First peak current value	7.5A ± 10% @ 2kV
	15.0A ± 10% @ 4kV
	22.5A ± 10% @ 6kV
	30.0A ± 10% @ 8kV
current value at 30ns	4.0A ± 30% @ 2kV
	8.0A ± 30% @ 4kV
	12.0A ± 30% @ 6kV
	16.0A ± 30% @ 8kV
current value at 60ns	2.0A ± 30% @ 2kV
	4.0A ± 30% @ 4kV
	6.0A ± 30% @ 6kV
	8.0A ± 30% @ 8kV

Technical Data	
Test program	
Summary procedure	Test according to different standards
Quick start	Simple and easy to reset data on line
Evaluation procedure	Test contact discharge at 20Hz
	Evaluate the test points of DUT
Standards	Comply with EN/IEC 61000-4-2 and EN 61000-6-1/-6-2
Setup	parameters, standards, etc

General Data	
Weight	approx. 2200 gram
Material	ABS plastic
Temperature	5 ~ 40°C
Humidity	20% – 80%
Power supply	100V – 240V +/-10% 50/60 Hz

Basic equipment	
Discharging gun	a discharging head
HV simulator	a set of HV mains
R/C module	150 pF / 330 ohm discharging module, renewable
Discharging electrode	air discharging head, contact discharging head
Grounding line	2m
Package	hand-held suitcase
Documents	user manual and calibration report

Accessories	
DM1-RFC1	150pF / 330 ohm
	Fast relay discharge module
	Rise time 200ps-300ps
DM2	150pF / 2,000 ohm (ISO 10605)
DM3	330pF / 2,000 ohm, discharge module
DM4	100pF / 1,500 ohm, discharge module
DM5	330pF / 2,000 ohm (ISO 10605)
DM6	330pF / 330 ohm (ISO 10605)
DM7	100pF / 1500 ohm
DM8	150pF / 150 ohm
DM9	500pF / 500 ohm
DM10	500pF / 5000 ohm
DMX	Customized discharge module
Esd.control	Software for remote-control and documentation
	Fiber optic interface
Grounding HV resistor	2×470 kohm
Vertical coupling plane	50cm x 50cm
Horizontal coupling plane	1600cm x 80cm
Reference ground plane	2700cm x 1800cm
Test desk	1.6×0.8m, solid wood
	Comply with IEC 61000 - 4 - 2
Fiber optic interface	USB
	The cable of 3m or 6m
	Max. baud rate: 19,200
Calibration set	to calibrate the waveform of IEC/EN61000-4-2, including 2 ohm target/ 4Ghz, attenuator, coaxial cable and user manual

Quality & Service For EMC



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