

SESD 30000

ESD simulator for requirements with different R (Ω) and C (pF) combinations



With self-test of the simulator



Saving costs for re-calibration

Absolutely necessary for automatic tests

- 30 kV air- and contact discharge
- Integrated automatic charge absorber
- Independent Resistor and Capacitor plug-in networks
- Version SESD 30000 A with battery and mains operation

Overview:

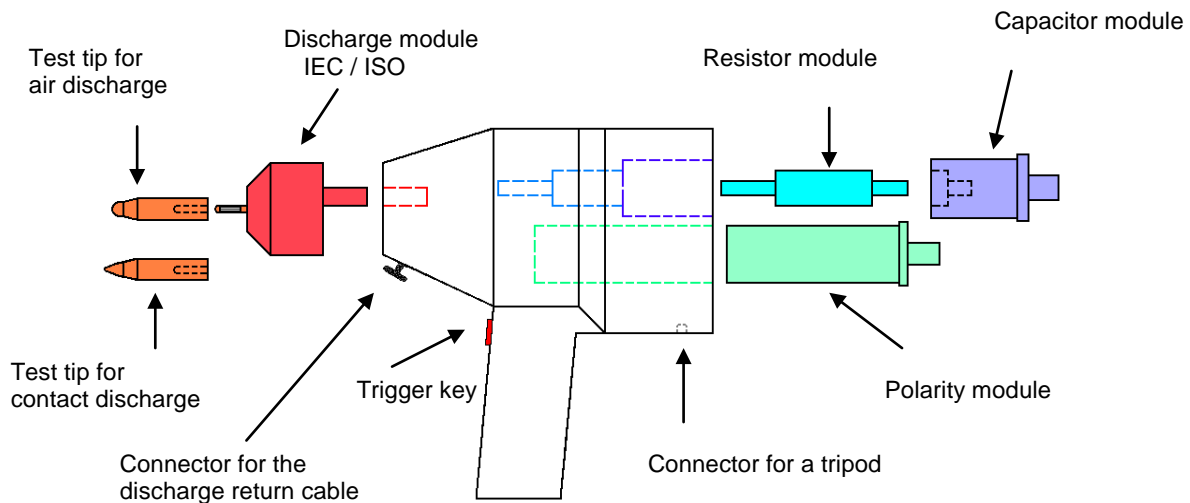
SESD 30000	ESD generator for mains operation, incl. Mechanical polarity module
SESD 30000 P	ESD generator for mains operation, incl. Electronic polarity module
SESD 30000 A_M	ESD generator for battery and mains operation incl. Mechanical polarity module
SESD 30000 A	ESD generator for battery and mains operation incl. Electronic polarity module

The ESD simulator SESD 30000 can be used for EMC tests on systems and installations according to the standards IEC / EN 61000-4-2 and others.

The flexible set-up of the SESD 30000 allows further tests according to different standard and customer definitions.

Benefits:

- Capacity modules available up to 1000 pF
- Resistor modules available from 50 Ohm up to > 5 kOhm; Special module 0 Ohm (only for air discharge)
- Automatic polarity switching module (optional)
- Fast Rise Time module for $t_r < 0,5$ ns (optional). Possibility more aggressive tests (e.g. ANSI)
- Desktop control unit with a big display and digits which are easy to read
- All modules are electronically recognised and identified on the display
- Ergonomic grip with big trigger key
- Big keys for easy and fast parameter adjustments
- User defined adjustments possible: contact discharge with contact control or external triggering
- Optional Software with RS 232 optical set with 10 m fibre optics cable
- Self- test of the ESD-generator, adjustment by remote control or service menu



Carry case SESD 30000 with accessories (6,7 kg):

- ESD Generator with connection cable
- Desktop control unit with mains cable
- Mechanical polarity switch modul
- Capacitor module 150 pF
- Resistor modle 330 Ohm
- Test tip for contact and air discharge
- Discharge return cable, 2 m
- Manual



Technical data:

Output voltage	adjustable via digital pot.
Air discharge	1 kV up to 30,0 kV in steps of 100 V
Contact discharge (with contact control)	1 kV up to 30,0 kV in steps of 100 V
Polarity Mode	positive and negative air discharge and contact discharge
<u>Repetition frequency of the discharge pulses</u>	
Air discharge	single or multiple pulses
Contact discharge	single pulse, 0.1 Hz, 0.2 Hz, 1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 Hz
Continuous operation	at air discharge and contact discharge
Pre-selection counter	1 - 9999

Standard Impedances	150 pF / 330 Ω (IEC / EN 61000-4-2)
Other impedances	see options
Probes	acc. IEC / EN 61000-4-2
Operation temperature	0 - 40° Centigrade
Rel. humidity	0 - 60%
Weight	app. 1500 g

2) Desktop Control Unit

Power supply	85 - 264 VAC, 47 - 63 Hz
Power consumption	< 50 VA
Weight	app. 1450 g



Electronic polarity module and mechanical polarity module

With the electronic polarity module, the polarity of the pulse can be changed between positive and negative by pressing the "Polarity" button on the base station.

In the case of the mechanical polarity module, this is done by pulling out the polarity module, turning 180 degrees and inserting it back into the generator.

Options / Accessories:

SESD 30000	ESD-Generator for mains operation, includes mechanical polarity switch module
SESD 30000 P	ESD generator for mains operation, includes electronic polarity switch module
SESD 30000 A_M	ESD generator for battery and/or mains operation, incl. mechanical polarity switch module
SESD 30000 A	ESD generator for battery and/or mains operation, incl. electronic polarity switch module
SESD 30 Cxxx	Capacity module (values up to 1000 pF)
SESD 30 Rxxx	Resistor module (values (0) 50 Ohm up to > 5 kOhm)
SESD 30 P200	Electronic polarity module
SESD 30 M200	Faster discharging module (rise time typically 0,45 ns)
SESD 30 S100	Optical set and remote software
SESD 30 MOD-1	HBM – module 100 pF / 1500 Ohm with rise time > 5 ns
SESD 30 Z 02	Special module with HV connecting cable for electro-explosive device testing
SESD 271	VCP – vertical coupling plate, include earth cable SESD 272
SESD 272	Earth cable with 2 x 470 kΩ resistors, 2m long
SESD 3025	Test tip, diameter 30 mm, for AIR discharge > 15 kV
SESD 3026	Test tip, length 50 mm with spring pin, for automatic tests with contact discharge
SESD 3027	Test tip, length 70 mm with spring pin, for automatic tests with contact discharge
SESD 3036	Hook for use on a support arm
SESD 30 T 1000	Support arm with balancer
SESD 8800-4	ESD verification set 2 Ohm (4 GHz) to verify the ESD pulse