

ESD - simulator IEC, ISO, ANSI,

SESD 30000

With self test of the simulator



Saving costs for re-calibration

Absolutely necessary for automatically tests



- ◆ 30 kV air discharge and 30 kV contact discharge
- ◆ Version SESD 30000 - A
Battery and / or main operation

- ◆ Optional: automatic charge absorber
- ◆ Plug- in R and C networks -
it is possible to combine various C - modules and R - modules

Introduction

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 ISO 10605 (Automotive).

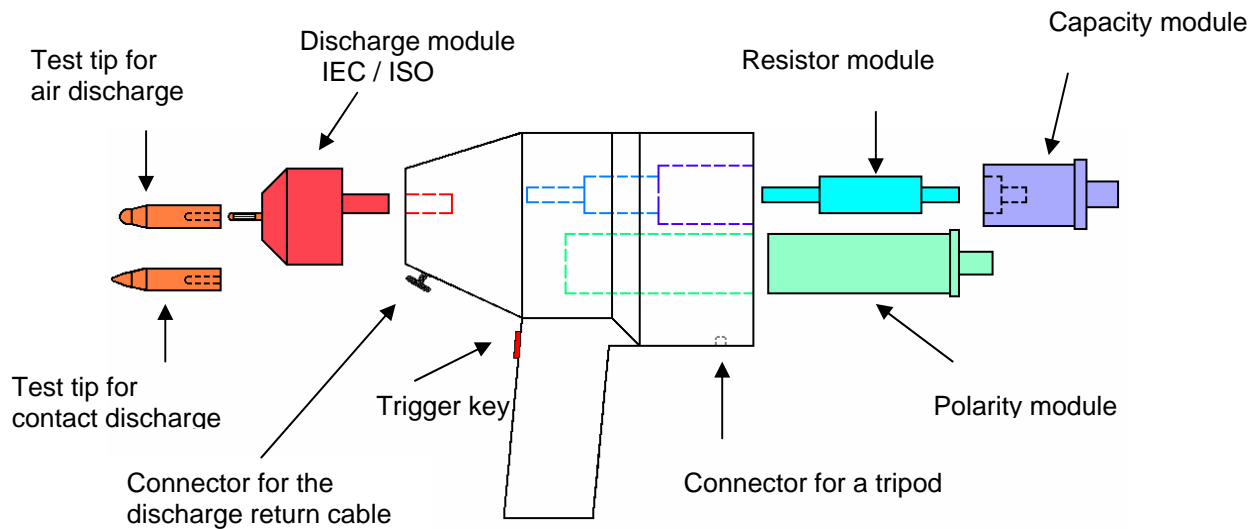
The flexible set-up of the SESD 30000 allows further tests according to different standard and customer definitions.

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 to 0,3 ns** (optional). Possibility of stricter and more aggressive tests (e.g. ANSI)
- ◆ Desktop control unit with a **big display** and digits which are easy to read
- ◆ All **modules** are being **electronically recognised** – the result is shown on the display
- ◆ **Ergonomic grip** with big trigger key
- ◆ **Big keys** for easy and fast parameter adjustments
- ◆ User defined adjustments possible as following: contact discharge with contact control or external triggering via separate key
- ◆ Remote control including RS 232 optical set with 10 m fibre optics cable and control software (optional)
- ◆ Self test of the ESD-generator, adjustment by remote control or service menu

Example: Test level and voltages according to IEC and ISO

IEC / EN 61000-4-2:	-> 150 pF / 330 Ohm, discharge voltage up to 30 kV
ISO TR 10605: Tests from inside the vehicle	-> 330 pF / 330 ohm and 2000 Ohm, up to 30 kV
Tests from outside the vehicle	-> 150 pF / 330 ohm and 2000 Ohm, up to 30 kV



Technical data: **SESD 30000**

Generator:

Output voltage ⊗ adjustable via digital pot
Air discharge ⊗ 1 kV up to 30,0 kV
 in steps of 100 V

Contact discharge ⊗ 1 kV up to 30,0 kV
(with contact control) in steps of 100 V

Polarity ⊗ positive and negative
Mode ⊗ air discharge and
 contact discharge

Repetition frequency of the discharge pulses
Air discharge ⊗ single or multiple pulses
 (frequency depends on the
 distance between probe
 and EUT)

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

Impedance standard: ⊗ 150 pF / 330 Ω
 (IEC / EN 61000-4-2)

 others: see options

Probes ⊗ acc. IEC / EN 61000-4-2
 and ISO / TR 10605

Operation temperature ⊗ 0 - 40° Centigrade

Rel. humidity ⊗ 0 - 60%

Weight ⊗ app. 1500 g

Basis configuration:

Mechanical polarity module

Capacity module 150 pF

Resistor module 330 Ohm

Desktop control unit

Power supply ⊗ 85-264 VAC, 47-63 Hz

Consumed power ⊗ < 50 VA

Weight ⊗ app. 1450 g

Options:

SESD 30000 P	ESD generator includes electronically polarity module
SESD 30000 A	ESD generator for battery and / or main operation
SESD 30 Cxxx	Capacity module (values up to 1000 pF)
SESD 30 Rxxx	Resistor module (values from 50 Ohm up to > 5 kOhm)
SESD 30 R0	Resistor module 0 Ohm (only for air discharge)
SESD 30 P200	Electronically polarity module
SESD 30 M200	Faster discharging module (rise time to 0,3 ns)
SESD 30 S100	Optical set and control software
SESD 30 MOD-1	HBM – module 100 pF / 1500 Ohm with rise time > 5 ns
SESD 30 MOD-3	Automatic ESD charge absorber, max. 2 Hz at "CON" discharge
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 8800-4	ESD verification set 2 Ohm (4 GHz) to verify the ESD pulse

