

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
- ◆ Optional: “High speed” ESD (rise time < 400 ps)
- ◆ Optional: automatic charge absorber
- ◆ Plug-in R and C networks - it is possible to combine various capacity modules and resistor 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 / TR10605, 1994 (Automotive).

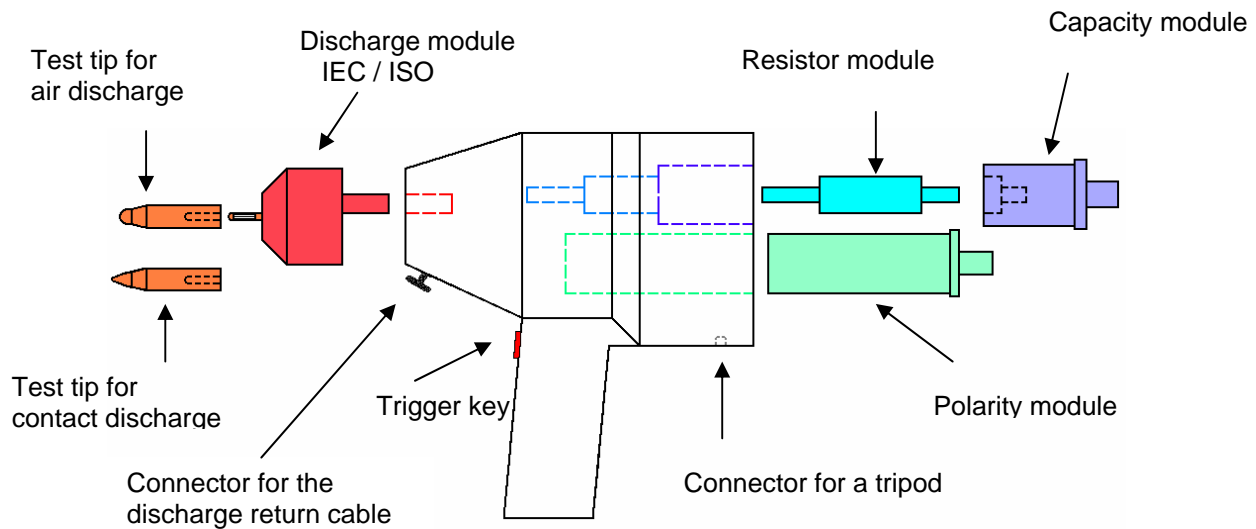
The flexible set-up of the SESD 30000 allows further tests according to different standard and customer definitions.

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)
- ◆ **Electrical polarity module** (optional)
- ◆ Discharge module with **faster rise time < 400 ps** (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: component / unit test	-> 330 pF / 2000 Ohm, discharge voltage up to 30 kV
tests outside the vehicle	-> 150 pF / 2000 Ohm, discharge voltage up to 30 kV



Technical data: **SESD 30000**

Generator:

Output voltage ⊗ adjustable via digital poti
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 ⊗ ca. 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 ⊗ ca. 1450 g

Options:

SESD 30000 P ESD generator includes electronically polarity module

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 < 400 ps)

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

