

ESD Simulator System

NSG 432

- Tests to standards such as IEC, ANSI-IEEE, VDE, NAMUR,
- MIL, ISO and SAE
- Contact discharge adapter
- Mains or battery powered options available

The high voltage discharge network appropriate to a particular application is simply fitted on to the lightweight, robust housing. A multi-turn potentiometer is used to set the discharge voltage, which is then clearly displayed on an LCD and a toggle switch sets the operating mode to single pulse or repetitive 20Hz pulsing. The pulse trigger is built into the hand grip. For multiple discharge testing, a tripod mount is available.

For very high voltage discharges, such as might be required to meet military specifications or for special applications, the NSG 432 ESD simulator system from [Schaffner](#) can be used to generate electrostatic discharges up to 25kV.

The NSG 432 is a compact, hand-held instrument, with a range of high voltage discharge networks for testing to various standards, including [IEC 61000-4-2](#). There is also a power supply, a power supply with preset counter, a mains independent battery pack, a contact discharge adapter and a range of accessories.



Technical Specifications

NSG 432

Discharge voltage V0 (air discharge)	2 - 25kV (0.2 - 2.5kV optional)
Discharge voltage V0 (with contact discharge adapter)	2 - 9kV
Polarity	positive / negative
Discharge - network - standard	150pF \pm 10%
Discharge - network - special	150pF/330 Ω as per IEC 61000-4-2
Operating modes	interchangeable networks to conform with other standards
Test finger	conforms to IEC 61000-4-2
Max discharge energy	350mJ (47mJ at 150pF)
Rise time (air-discharge)	<1ns for voltages \leq 8kV
Rise time (with contact discharge adapter)	0.7 - 1ns
First current peak (with contact discharge adapter) at a voltage set to:	
2kV	7.5A \pm 10%
4kV	15A \pm 10%
6kV	22.5A \pm 10%
8kV	30A \pm 10%
Current pulse shape	conforms to IEC 61000-4-2
Voltage indication tolerance (LCD)	\pm 5%
Holding time	>5s
Charging resistor RCh	100M Ω