NSG 437
30kV ESD Simulator

MAIN FEATURES

- **Air- and contact-discharge to 30 kV**
- **Color touch panel control**
- **Advanced voltage-hold feature**
- **Activity log**
- **Light version with uncompromising test performance**
- **Compliant with a huge range of OEM and international standards**
- **Easily and quickly interchangeable discharge networks**
- **Discharge detector**

ESD testing, clear and simple

Ergonomic design and advanced functionality. The NSG 437 ESD simulator is designed to sit comfortably in the operator's hand, with operating conditions constantly displayed and accessible on a bright, clear color touch display. NSG 437 comprehensively fulfills virtually all international standard requirements and meets any of today's automotive manufacturers' standards. The simulator is simple, convenient and safe to use. The whole range of parameter settings including polarity selection, freely adjustable pulse repetition, counter functions and discharge detection is available up to the maximum discharge voltage.
The color touch display and keypad for parameter input shows the precise functional and test data with user-selectable language for convenient and safe operation worldwide.
The simulator contains variable threshold selection for accurate discharge detection. This detection feature can be switched off when testing EUT's with non-conductive surfaces, such as plastic housings.
Pre-programmed settings for IEC 61000-4-2 and ISO 10605 ensure that the simulator is automatically set up correctly and the appropriate discharge network is installed. The actual RC value is displayed at all times. The simulator is recalibrated and adjusted at every start.
A unique activity log is included so that the types and numbers of ESD simulations can be easily scrolled through to check what has been tested and in what timeframe.

Models

NSG 437-EU	Basic set, Schuko connector
NSG 437-GB	Basic set, GB connector
NSG 437-JP	Basic set, JP connector
NSG 437-US	Basic set, US connector
NSG 437-AUTO-EU	Automotive set, Schuko connector
NSG 437-AUTO-GB	Automotive set, GB connector
NSG 437-AUTO-JP	Automotive set, JP connector
NSG 437-AUTO-US	Automotive set, US connector

Specifications subject to change without notice. Ametek CTS is an ISO accredited Company. Products are designed and manufactured under strict quality and environmental requirements of ISO 9001.

NSG 437

30kV ESD Simulator

Specifications

Parameter	NSG 437
Pulse network	150 pF / 330 Ω as per IEC 61000-4-2 and ISO 10605
Discharge voltage	Contact discharge: 200 ... 30'000 V (in 100 V steps) Air discharge: 200 ... 30'000 V (in 100 V steps)
Charging voltage accuracy	< +/- 5 %
Frequency / repetition	0.5, 1, 5, 10, 20, 25* Hz (* only in AD mode)
Polarity	pos / neg / automatic change
Operating modes	single / continuous
Counter	1 ... 9'999
Holding time	> 5 s (charging voltage +/- 5 %)
Discharge detection	Yes, AD only. Indication display / acoustically
Auto-shut-off	After 15 minutes idle time (w/o loss of test parameters)
Discharge tips	exchangable, ball and point as per IEC 61000-4-2
Display	Color touch screen
Power mains (base station)	100 ... 250 VAC 60 / 60 Hz
Weight	Discharge pistol (w/o cable): approx. 1.2 kg Base station : approx. 5.7 kg
Ambient conditions (operation)	+ 5 ... +40 °C / 20 ... 80 % humidity (non condensing) / 68 ... 106 kPA

Sets

NSG 437-xxx	NSG 437-AUTO-xxx
ESD simulator incl. power mains supply adapter & power cord	ESD simulator incl. power mains supply adapter & power cord
150 pF / 330 Ω discharge module	150 pF / 330 Ω discharge module
Contact- and air discharge tip	150 pF / 2000 Ω discharge module
Ground return cable	330 pF / 330 Ω discharge module
	330 pF / 2000 Ω discharge module
	Contact- and air discharge tip
	Ground return cable

Additional Accessories

INA 4421	Tripod support for NSG 437 / NSG 438
INA 4423	Carry case for NSG 437 / NSG 438
TIP30 AD	30 kV Air Discharge Tip
TIP30 CD	30 kV Contact Discharge Tip
TIP30 CD FAST	Fast rise tip, approx. 0.4 ns
TIP30 FLEX SET	Set of flexible tips when DUT access is difficult
VCP	Vertical Coupling Plane
EAS 30-x	Grounding set 2x 470 kΩ, 0.8 m / 1.5 m / 2 m cable length
MD 102A	Calibration target as per IEC 61000-4-2
INA 102A	50 Ω calibration adapter for MD 102A
INA 4381	150 pF / 2000 Ω discharge module
INA 4382	330 pF / 2000 Ω discharge module
INA 4553	330 pF / 330 Ω discharge module
Special discharge networks	Ask our sales team for availability

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