

# ESD NX30

## ELECTROSTATIC DISCHARGE SIMULATOR UP TO 30 KV



### FOR TESTS ACCORDING TO ...

- › BMW 600 13.0 (Part 2)
- › BMW GS 95002 (2010)
- › DaimlerChrysler DC-10613
- › DaimlerChrysler DC-10614
- › DaimlerChrysler DC-11224
- › EN 61000-4-2
- › Ford EMC-CS-2009.1
- › Ford ES-XW7T-1A278-AC
- › Ford FMC1278
- › GMW 3097
- › GMW 3097 (2001)
- › GMW 3097 (2004)
- › GMW 3097 (2006)
- › GMW 3100
- › GMW 3100 (2001)
- › Hyundai/Kia ES 96100-02 (2006)
- › IEC 61000-4-2
- › IEC 61326
- › ISO 10605
- › JASO D001-94
- › Mazda MES PW 67600
- › ...

### ESD NX30 - GENERATES ESD PULSES ABOVE EN/IEC 61000-4-2 TEST LEVELS











Electrostatic discharges either from a human body to any other part or between two different objects can cause persistent disturbances or even destruction to sensitive electronics or controls.

esd NX30 is an ESD tester to simulate ESD pulses at higher voltages up to 30 kV in both air and contact discharge mode. It therefore satisfies requirements exceeding the EN/IEC 61000-4-2 test levels and complies to automotive test applications.

### HIGHLIGHTS

- › **Test voltage up to 30 kV for air and contact discharge**
- › **Color touch display**
- › **Discharges up to 25 Hz**
- › **80 easy-to-change R/C-networks and tips**
- › **Switchable Bleed-Off function**
- › **Built-in activity log**
- › **AC mains supply and DC supply**
- › **Battery tested to 30,000 pulses @30 kV**

### APPLICATION AREAS

- |                                                                                                 |                                                                                                        |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
|  AUTOMOTIVE  |  COMPONENTS       |
|  INDUSTRY    |  TELECOM          |
|  MEDICAL     |  RENEWABLE ENERGY |
|  BROADCAST   |  MILITARY         |
|  RESIDENTIAL |  AVIONICS         |

## TECHNICAL DETAILS

### TEST LEVEL

Test voltage	200 V - 30,000 V $\pm$ 5 % for contact discharge
	200 V - 30,000 V $\pm$ 5 % for air discharge
Resolution	100 V steps
Holding time (AD)	More than 5 s

### BASE STATION ESD NX30

HV power supply	Up to 30 kV DC
Battery	Approx. 30 k discharges; Battery is automatically recharged when connected to AC mains supply
Interface	Optical and interlock

### DISCHARGE GUN

Controls	Color touch display
Test level	200 V to 30,000 V
Polarity	Positive, negative; selectable
Discharge mode	Air or Contact discharge, selectable
Discharge tip	Point and ball type

### TRIGGER

Single pulse	Release of a single pulse
Multiple pulses	Continuous air discharge up to 25 Hz, contact discharges up to 20 Hz, random discharges
Counter	0 - 9,999 for discharge pre-selection

### OUTPUT

Contact Discharge Pulse	As per EN/IEC 61000-4-2; 150 pF/330 ohm
Rise time	As per EN/IEC 61000-4-2 Ed.2 0.8 ns +/- 25%
First peak current value	As per EN/IEC 61000-4-2 Ed.2 7.5 A $\pm$ 15 % @2 kV 15 A $\pm$ 15 % @4 kV 22.5 A $\pm$ 15 % @6 kV 30 A $\pm$ 15 % @8 kV
Current value at 30ns	As per EN/IEC 61000-4-2 Ed.2 4.0 A $\pm$ 30 % @2 kV 8.0 A $\pm$ 30 % @4 kV 12.0 A $\pm$ 30 % @6 kV 16.0 A $\pm$ 30 % @8 kV
Current value at 60ns	As per EN/IEC 61000-4-2 Ed.2 2.0 A $\pm$ 30 % @2 kV 4.0 A $\pm$ 30 % @4 kV 6.0 A $\pm$ 30 % @6 kV 8.0 A $\pm$ 30 % @8 kV

### GENERAL

Weight	Approx. 6.5 kg (Base Station)
Weight	Approx. 1,250 g (discharge gun)
Supply voltage	AC: 100 V - 240 V, 50/60 Hz

### ACCESSORIES (INCLUDED)

	Discharge tips for AD and CD
	Grounding lead 2 m
	Test certificate and instruction manual

**TECHNICAL DETAILS**

OPTIONS (NOT INCLUDED)	
RCN30 150-330	150 pF/330 Ohm discharge network
RCN30 150-2000	150 pF/2000 Ohm discharge network
RCN30 100-1500	100 pF/1500 Ohm discharge network
RCN30 330-330	330 pF/330 Ohm discharge network
RCN30 330-2000	330 pF/2000 Ohm discharge network
RCN30 150-150	150 pF/150 Ohm discharge network
RCN30 x-x	A large range of 80 RC networks, custom networks available from 0 ohm to 20 kohm, up to 2 nF
VCP	Vertical coupling plane
EAS30	Grounding resistors 2 x 470 kOhm
CSL 200	Field coupling plane and field coupling strip as per ISO 10605, Annex F and DC-11224 for ESD powered-up test of electronic modules, requires EAS 30
esd.control	Remote control and documentation software for ESD testing. Supports the creation of test plans and download of related test sequences into the ESD generator
OptoLink	Fiber optic link between dito and PC (USB port) fitted with USB A connector, length 3 m or 6 m, max. baud rate of 19,200.
Other Tips	H-field and E-field, flexible air and contact discharge tips, extensions for testing in dangerous environments (airbags, etc) and more.

# COMPETENCE WHEREVER YOU ARE



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