

ESD 30N

ELECTROSTATIC DISCHARGE SIMULATOR UP TO 30KV



FOR TESTS ACCORDING TO ...

- > BMW 600 13.0 (Part 2)
- > BMW GS 95002 (1999)
- > DaimlerChrysler DC-10613
- > DaimlerChrysler DC-10614
- > EN 61000-4-2
- > Ford ES-XW7T-1A278-AB
- > Ford ES-XW7T-1A278-AC
- > 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
- > Mercedes AV EMV
- > Mitsubishi ES-X82010
- > Nissan 28401 NDS 02
- > Porsche
- > PSA B21 7110
- > ...

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

HIGHLIGHTS

- > **TEST VOLTAGE UP TO 30KV FOR AIR AND CONTACT DISCHARGE**
- > **DISCHARGES UP TO 20HZ**
- > **EASY-TO-CHANGE R/C-NETWORKS AND TIPS**
- > **BLEED-OFF FUNCTION**
- > **MEASUREMENT OF TEMPERATURE AND HUMIDITY**
- > **AC MAINS SUPPLY AND DC SUPPLY**
- > **BATTERY OPERATED**
- > **EXTERNAL TRIGGER FUNCTION**

APPLICATION AREAS

- | | |
|---|--|
|  AUTOMOTIVE |  COMPONENTS |
|  INDUSTRY |  TELECOM |
|  MEDICAL |  AIRCRAFT |
|  BROADCAST |  MILITARY |
|  RESIDENTIAL | |

TECHNICAL DETAILS

TEST LEVEL

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

MAINFRAME ESD 30N

HV power supply	Up to 30kV DC
Power supply	88V - 250V AC 12V - 18V DC
Battery	Approx. 1 hour operation; Buffer battery is automatically recharged when connected to AC mains supply
Interface	USB to control the ESD generator and to download pre-programmed test routines from esd.control

DISCHARGE UNIT P 30N

	Hand held discharge unit
Controls	2 function keys and one control wheel
Display	Graphic LCD display
Test level	200V to 30,000V
Polarity	Positive, negative; selectable
Discharge mode	Air or Contact discharge, selectable
Discharge tip	Point and ball type
Indicators	Integrated sensor to measure temperature and rel. humidity

TRIGGER

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

OUTPUT

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

GENERAL

Weight	Approx. 5.1kg (ESD 30N control unit)
Weight	Approx. 1,250g (P 30N discharge gun)
Supply voltage	115V/230V +10%/-25%, 50/60Hz or 12V to 18V DC
Fuses	2x 0.5A T

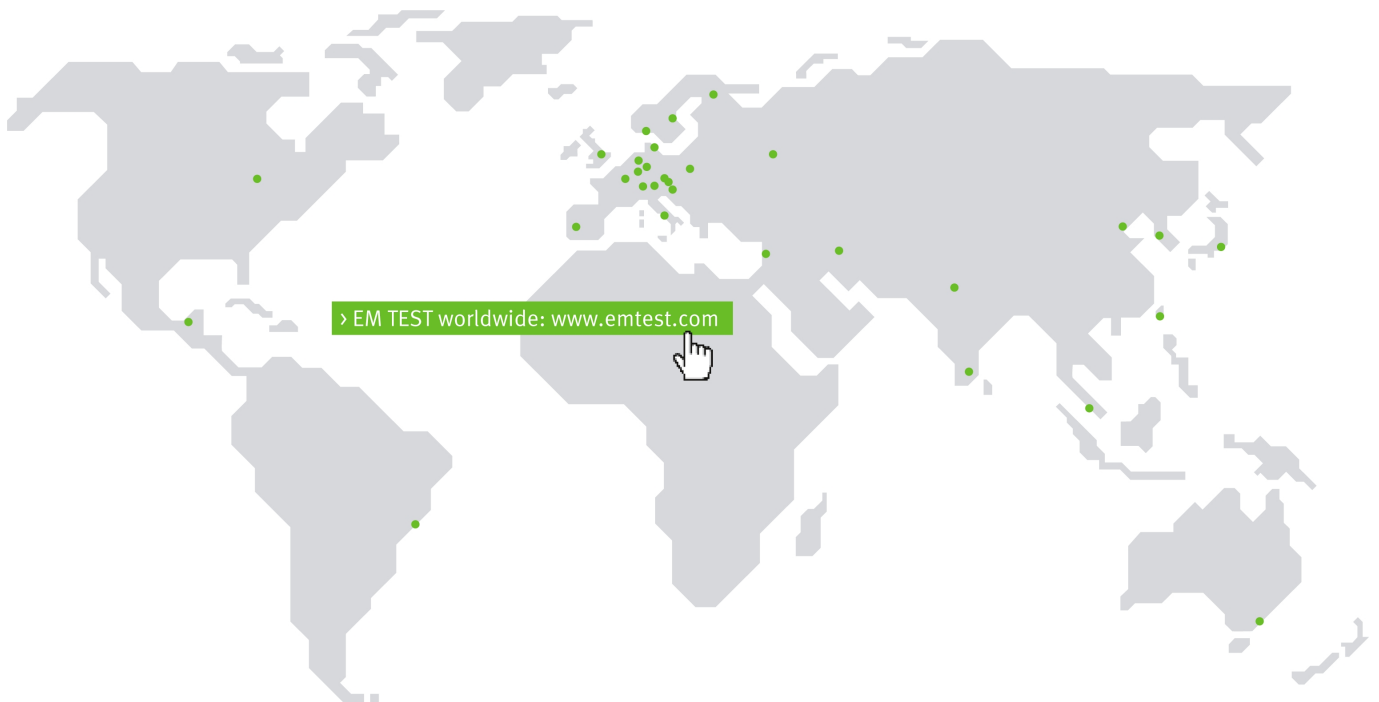
ACCESSORIES (INCLUDED)

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

OPTIONS (NOT INCLUDED)

RCN 1	150pF/330 Ohm discharge network
RCN 2	150pF/2000 Ohm discharge network
RCN 3	330pF/2000 Ohm discharge network
RCN 4	100pF/1500 Ohm discharge network
RCN 5	330pF/330 Ohm discharge network
RCN x	Customer specific discharge network
ESDMAG	Magnetic Field probe for P30N
P 30N-30	30mm discharge electrode
VCP	Vertical coupling plane
EAS30	Grounding resistors 2 x 470kOhm

COMPETENCE WHEREVER YOU ARE



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Information about scope of delivery, visual design and technical data correspond with the state of development at time of release.
 Technical data subject to change without further notice.