

DITO

ESD SIMULATOR



FOR TESTS ACCORDING TO ...

- › Bellcore GR-1089-Core
- › Chrysler PF-9326
- › DaimlerChrysler PF-10540
- › EN 300329
- › EN 300340
- › EN 300342-1
- › EN 300386 V1.3.2
- › EN 301489-1
- › EN 301489-17
- › EN 301489-24
- › EN 301489-7
- › EN 55024
- › EN 61000-4-2
- › Fiat 9.90110
- › Ford EMC-CS-2009.1
- › Ford ES-XW7T-1A278-AB
- › Ford ES-XW7T-1A278-AC
- › Ford WDR 00.00EA
- › IEC 61000-4-2
- › IEC 61326
- › ISO 10605
- › ...











DITO - THE ULTIMATE ESD TESTER

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. Voltages of several 1,000 volts are generated. dito is the most advanced ESD tester to simulate ESD pulses as per EN/IEC 61000-4-2 and other standards requirements.

HIGHLIGHTS

- › **Most ergonomic design**
- › **Light weight (870g)**
- › **Interchangeable discharge tips**
- › **Interchangeable R/C networks**
- › **LiFePO4 power booster to perform long duration tests**
- › **Library of standard test routines**
- › **Test voltage measurement and control**
- › **Various test routines for testing and evaluation**

APPLICATION AREAS

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

TECHNICAL DETAILS

TEST LEVELS

| | |
|--------------|------------------------------------|
| CD mode | 500V - 10,000V +/-5% |
| AD mode | 500V - 16,500V +/-5% |
| Resolution | 100V steps |
| Holding time | More than 5 seconds |
| Polarity | Positive, negative |
| Test voltage | measured, indicated in the display |

TRIGGER

| | |
|----------------------------|---|
| Single mode | Release of single pulses |
| Continuous mode | Continuous discharge up to 20Hz (AD) and 10Hz (CD) |
| Pulse release via software | Remote control from computer via fiber optic link (USB) |

OUTPUT

| | |
|------------------|---|
| CD mode | EN/IEC 61000-4-2; 150pF/330ohm |
| Rise time | 0.8ns +/- 25% |
| Current 1st peak | 7.5A +/- 15% @2kV 15.0A +/- 15% @4kV 22.5A +/- 15% @6kV 30.0A +/- 15% @8kV |
| Current at 30ns | 4.0A +/- 30% @2kV 8.0A +/- 30% @4kV 12.0A +/- 30% @6kV 16.0A +/- 30% @8kV |
| Current at 60ns | 2.0A +/- 30% @2kV 4.0A +/- 30% @4kV 6.0A +/- 30% @6kV 8.0A +/- 30% @8kV |

TEST ROUTINES

| | |
|------------------------|--|
| Easy Zap | Test based on standard levels |
| Quick Zap | All test parameters are adjustable during test; fast and easy-to-use |
| Evaluation | Air discharge with 20Hz; for test point evaluation on the DUT |
| Standard Test routines | As per EN/IEC 61000-4-2, EN 61000-6-1/-6-2 |
| Set-up | Parameters, standard levels, etc. |

DISPLAY AND CONTROLS

| | |
|-----------|---|
| Display | LCD graphic display; 128 x 64 pixels |
| Operation | 5 function keys, 2 cursor keys, pulse trigger |

OPERATION

| | |
|----------------|--------------------------------|
| Manual | Via function keys |
| Remote control | Via built-in optical interface |

VOLTAGE SUPPLY

| | |
|----------------|---|
| Battery (ACCU) | More than 70,000 pulses @ 16.5kV; automatic power-off after 10 minutes if not operated LiFePo4 12.8V - 1000mAh |
| Mains supply | Via mains supply adapter (MAD) |

GENERAL DATA

| | |
|-----------------|--|
| Weight | 870 grams incl. battery |
| Case material | ABS; non-inflammable as per UL 94VO |
| Temperature | 5°C - 40°C (operation conditions) |
| Rel. humidity | 20% - 80% (operation conditions) |
| Battery charger | 100V - 240V +/-10%; 50/60Hz Charging time less than 2 hours |

ACCESSORIES

| | |
|----------------|--|
| DM1 | 150pF/330ohm discharge module with built-in contact discharge relay; Discharge tips for AD and CD |
| PowerPack dito | Rechargeable battery LiFePo4 12.8V - 1000mAh Built in safety module for low voltage protection |
| CU dito | Charging Unit dito Battery charger |
| | Transportation case, grounding lead 2m, test certificate and operation manual |

TECHNICAL DETAILS

| OPTIONAL ACCESSORIES | |
|----------------------|---|
| DM1-RFCI | Fast Relay Discharge module with 150pF/330ohm; Rise time 200ps - 300ps |
| DM2 | Discharge module 150pF/2,000ohm |
| DM3 | Discharge module 330pF/2,000ohm |
| DM4 | Discharge module 100pF/1,500ohm |
| DMx | Customer specific discharge module |
| esd.control | Remote control and documentation software incl. optical interface IFA |
| VCP | Vertical coupling plane 50cm x 50cm, incl. EAS 30 grounding set 2x470kohm |
| EAS 30 | Grounding set 2x470kohm |
| MAD | Power mains adaptor |
| OptoLink | Fiber optic link between dito and PC (USB port) fitted with USB A connector, length 3m or 6m, max. baud rate of 19,200. |

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. Subject to change without further notice.