

# 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.