

PULSED EMI

Models CM-ESD and PRO-ESD ACCESSORIES

Electrostatic Discharge



ESD accessories for Electrostatic Discharge (ESD) testing beyond IEC 1000-4-2 with the CEMASTER® and EMCPro™ Compliance-Level Immunity Test Systems.

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Diagnostic E and H-Field Simulation

- **MZT-11** – E-Field Simulation Tip:
Provides repeatable, local **static** E-Field simulation for interrogating high-impedance circuits for upsets due to various levels of fixed or slowly changing electric fields.

Provides repeatable, fast rise time, local **dynamic** E-Field simulation, while simultaneously minimizing the effects of local ESD-generated H-Fields. The purpose is to isolate circuits sensitive to real-world ESD E-Fields, which often have sub-nanosecond edges.

- **MZT-12** – H-Field Simulation Tip provides repeatable, local dynamic H-Field simulation, while simultaneously minimizing the magnitude of local ESD-generated E-Fields. Analogous with dynamic E-Field simulation, the purpose of diagnostic H-Field simulation is to isolate circuits sensitive to real-world ESD H-fields, which often have super-fast rise times.

Vertical & Horizontal Coupling Plane For Indirect ESD Testing

- **VCP-1** – Vertical Coupling Plane for indirect ESD tests per IEC 1000-4-2 is used to simulate the effects of human body ESD events to metal objects adjacent to an EUT. The specified 0.5 x 0.5m vertical coupling plane includes: insulation at back of plane for personal protection, convenient bench stand for hands-off testing, handles and camera tripod mount to facilitate off-bench use.
- **HCP-1** – Horizontal Coupling Plane for indirect ESD tests per IEC 1000-4-2 is used to simulate the effects of human body ESD events to a metal bench or desk on which the EUT may be resting. The specified 1.6 x 0.8m horizontal coupling plane includes a roll of <.5mm thick, static-dissipative sheet insulator for use above the plane for personal protection (meets IEC 1000-4-2 insulation thickness requirements).

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AIR DISCHARGE AND CONTACT MODE TESTING

- TPC-3:** Replacement contact mode tip for direct ESD tests in accordance with the rise times specified in IEC 1000-4-2 (0.7 - 1ns)
- TPA-2:** Replacement air discharge tip for ESD tests in accordance with IEC 1000-4-2

CALIBRATION TESTING

- CTC-3:** Coaxial current monitor: IEC 1000-4-2 coax monitor for ESD current waveform, with 1GHz capability. Includes high-peak-power attenuator and low loss scope cable. IEC and ANSI require mounting the target in a 1.5m x 1.5m plane. See TP-3 accessory
- FCS-1:** Field and Corona Sensor Group: Common Monitor Unit HEC-1, H-Field sensor HFS-1, E-Field sensor EFS-1 and Pre-Discharge corona sensor CCS-1
- DCA-2:** DC Output Calibration Attenuator for an independent measurement of the ESD voltage on the tip of the CM-ESD
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ADDITIONAL OPTIONS

- TP-3:** Full, 1.5m x 1.5m (59" x 59") IEC 1000-4-2 and ANSI C63.16 Target Plane, for mounting the CTC-3 coaxial target
- T-2:** A non-conducting tripod which holds the CM-ESD or PRO-ESD simulator steady against equipment being tested with hundreds of discharges at a single point, without interfering with the test results
- MCA-1:** Hard Carry Case (does not include space for VCP-1, HCP-1, T-2 or TP-3)

MINIMUM SYSTEM REQUIREMENTS

- CEMASTER:** CM-BASE and CM-ESD with CM-SW or CM-FP
- EMCPro:** PRO-BASE and PRO-ESD
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For additional CEMASTER® and EMCPro™ literature, call, email or fax the KeyTek sales department.



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