

Keytek ESD-1 Specs

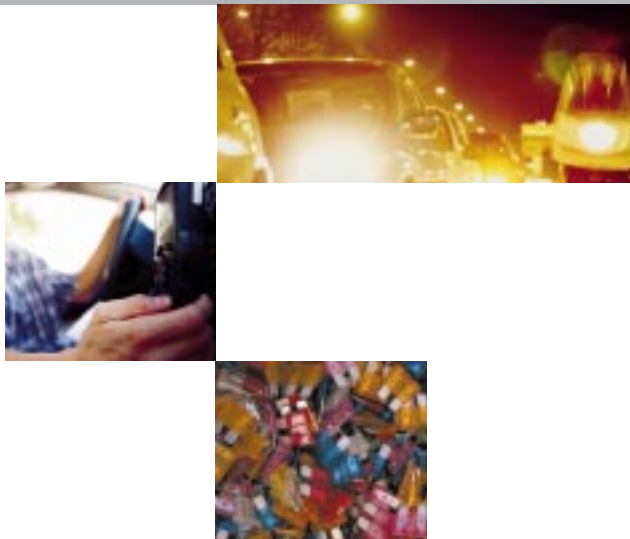
Provided by www.AAATesters.com

The KeyTek Series 2000 ESD hand-held or tripod-mounted test system provides a combination of performance characteristics that enable users to test to various ESD standards including IEC, ANSI, SAE and MIL-STD.

Interchangeable discharge networks, current injection adapters, and tips (bundled or stand-alone) all plug directly into the discharger's barrel, and facilitate testing to a broad range of ESD test methodologies to help users achieve market and company-driven quality objectives, and regulatory standards.

KeyTek Series 2000

ESD simulation test system



Continuously selectable voltage from 0 to 25kV, positive and negative

Interchangeable discharge networks, current injection adapters & tips for ESD testing to multiple standards

Contact mode and air discharge testing including auxiliary adapters for air discharge generation & all five of its basic components

Single-shot or programmable repetitive operating modes

Optional E-field & H-field simulators

Hand-held or tripod-mounted operation

Versatile, non-obsolescent design



An ESD simulator for today and tomorrow

With a wide range of features and available options, the KeyTek Series 2000 is a versatile and non-obsolescent ESD simulation system for product designers and manufacturers seeking to achieve ongoing market or company-driven quality standards.

The basic system is comprised of two interconnected units: the ESD-1 Discharger (or gun) that may be either hand-held or tripod mounted, and its associated Power Supply/Control Unit PSC-1. The ESD-1 Discharger contains a basic handle, polarity switch, high voltage set knob, a Digital Stored Voltage Monitor (DVM), and an audible discharge monitor that informs user when a discharge has occurred. The Power Supply/Control Unit includes selectors for repetition rates, charge rate and burst/normal modes.

Flexible, highly controllable test operations

With built-in capability for continuously selectable voltages from 0 to 25kV (positive and negative), an in-depth library of interchangeable plug-in discharge networks, available air discharge test options, and programmable repetitive or single-shot operating modes, the KeyTek Series 2000 makes it easy to do ESD testing to multiple standards.

Bundled KeyTek Series 2000 tester groups are available to achieve specific ESD test objectives – please see reverse side for information.

| Capability | Model # | 2030G | 2030(STD) | 2031 | 2032 | 2033 | 2034 |
|--|--------------|-------|-----------|------|------|------|------|
| 1. AIR-DISCHARGE SIMULATION | | | | | | | |
| Discharge: ± 1 to ± 25kV, single shot and repetitive (interval: 10s, 3s, 1s, .05s). Built-in DVM directly measures stored high voltage. | ESD-1 | • | • | • | • | • | • |
| IEC human-body-model Discharge Network (150 pF/150 Ω). | DN-1** | | | | | | |
| IEC 61000-4-2 human-body-model Discharge Network (150 pF/330 Ω). | DN-10 | • | • | • | • | • | • |
| IEC ball Discharge Tip | DT-1 | • | • | • | • | • | • |
| 2. ACCESSORIES AND POWER SUPPLY | | | | | | | |
| Corona and Field-Enhancement Discharge Tip | DT-2 | • | • | • | • | • | • |
| Proximity-Test, Self-Discharge Tip | FT-10 | | | • | • | • | • |
| Power Supply/Control Unit | PSC-1 | • | • | • | • | • | • |
| Carrying Case | CA-1A | • | • | • | • | • | • |
| 3. AUXILIARY DISCHARGE AND FIELD TIPS | | | | | | | |
| Wedge, Simulating Tool | DT-3 | | | | • | • | • |
| E-Field (electric field) Simulator | FT-11 | | | | • | • | • |
| H-Field (magnetic field) Simulator | FT-12*** | | | | • | • | • |
| Discharge E-Field Collapse Adapter | FT-21*** | | | | • | • | • |
| 4. DIRECT CURRENT INJECTION, including | | | | | | | |
| Fast Air-Discharge Mode, via 20kV Fast-Approach Current Injection Adapter | FA/CIA™-20 | | | | • | • | • |
| 5. ADDITIONAL ACCESSORIES | | | | | | | |
| Carrying Case | CA-2A | | | | • | • | • |
| Coax monitor for ESD current waveform. Includes Ground Plane (GP-1), scope cable with 50Ω Termination (TC-50), and Short Ground Strap (GCS-1) (For 400 MHz applications only). | CTC-1 | | | | | | |
| IEC coax monitor for ESD current waveform With 1GHz capability. Includes high-peak-power attenuator and scope cable. (Requires 1.5m x 1.5m target-plane). | CTC-3 | | | | | | • |
| Target-plane Assembly, 1.5m x 1.5m as specified by IEC 61000-4-2 | TP-3 | | | | | | |
| Probe Conversion Cable; Remotes any Discharge Network as light, hand-held probe | EC-1 | | | • | • | • | • |
| DC Output Calibration Attenuator | DCA-1 | | | | | | • |
| Field and Corona Sensor Group | FCS-1 | | | | | | • |
| Common Monitor Unit, HEC-1 | | | | | | | |
| H-Field sensor, HFS-1 | | | | | | | |
| E-Field sensor, EFS-1 | | | | | | | |
| Pre-Discharge corona sensor, CCS-1 | | | | | | | |
| 6. ADDITIONAL DISCHARGE NETWORKS | | | | | | | |
| NEMA Part DC33 and MIL STD 883E Discharge Network (100 pF/1500 Ω) | DN-2 | | | | | | |
| Upper/lower-body-model Discharge Network (700 pF/100K/150 pF/150 Ω) | DN-3 | | | | | | |
| Segmented-body-model Discharge Network (700 pF/100K/150 pF/150 Ω/20 pF-50 Ω) | DN-4 | | | | | | |
| Optimum basic human-body-model network: | | | | | | | |
| EIA Std, PN-1361 (Draft 6, 1985) Discharge Network (100 pF/500 Ω) | DN-6** | | | | | | |
| 300 pF/5K ohms human-body-model discharge network per SAE Std. J1211 | DN-7 | | | | | | |
| 330 pF/2K ohms human-body-model discharge network per SAE Std. J1113 | DN-7A | | | | | | |
| Custom-configured relay mode (please state RC values on order) | DNX | | | | | | |
| 7. TRUE-ESD™ AND CONTACT MODE | | | | | | | |
| True ESD™ Hand-Tip/Discharge-Tip Combination | HT-10/DT-4** | | | • | | • | • |
| Contact Mode, Fast-Rise Current Injection (FR/CI™), As per IEC 61000-4-2 (7-1 ns rise time). Specified with DN-10 only | CIA-V | | • | • | | • | • |

** DN-10 may be substituted directly for DN-1; IEC Contact Mode module, CIA-V (for use with DN-10) may be directly substituted for DN-6 and HT-10/DT-4.
 *** Requires an FA/CIA™, FA/CIA-20 is recommended.

This sheet is for informational purpose only and is subject to change without notice.

© 2004 Thermo Electron Corporation. All rights reserved. Thermo Electron Corporation, Question everything, and Analyze. Detect. Measure. Control. are trademarks of Thermo Electron Corporation.