



**Electro-Tech Systems' PinPulse is the industry's leading electrostatic discharge event simulator.** PinPulse is an invaluable tool in the development of electronic devices, providing evaluation of their susceptibility to ESD events. Serving as a manual two-point ESD simulator ideal for low pin count devices, the system expertly delivers HBM, HMM, MM and optional CDM test capability. All waveforms are in compliance with current JEDEC & ESDA standards. The simulator generates pristine parasitic free waveforms over the range of voltages from 5V to 8kV. PinPulse is also the core modular component in ETS's comprehensive automated ESD testing platform, PinScan™.

## Standards Satisfied

ANSI/ESDA/JEDEC JS-001-2012, (HBM) MIL STD. 883E, (HMM) IEC6100-4-2, (MM) ANSI/ESDA S5.2-2012

## Applications

- Compatible package types: BGA, DIP, SOIC, and many more
- Relevant components: Integrated Circuits, Diodes, LEDS, Optoelectronics, etc.
- Relevant Processes: R&D, Quality Assurance, Process Validation

## Key Features

- Industry-Acclaimed Parasitic free waveforms
- Voltage Range  $\pm 5V$  to  $\pm 8kV$  HBM, MM, HMM, & Optional CDM
- Programmable polarity and voltage stepping
- Controlled using front panel keypad
- DUT Boards allow for easy manual connection to pins
- User-accessible command set and serial interface supports control by user-generated software

### Specifications

#### Control Section:

Voltage Range:  $\pm 5$  to  $\pm 8250$  V  
HV Selection: Keypad or computer control

Display: 4-line vacuum fluorescent  
Resolution:  $\pm 1$  V  
Accuracy: Better than 5%

AUTO Mode:  
Discharges: 1-9  
Interval: 1-99 sec

Computer Interface: Serial communication

Power:  
Voltage: 90-260 VAC, 50/60 Hz  
Input: IEC Socket with 6' (1.83m) cable with  
NA Plug

Mechanical:  
Dimensions: 19"W x 12"D x 3.75"H  
(48.24 x 77.4 x 9.5 cm)  
Weight: 12 lbs. (5.4 kg)

#### Discharge Section:

Voltage Range:  $\pm 5$  to  $\pm 8250$  V

ESD models supported:

- HBM: 100 pf  $\pm 5\%$  Cap & 1500  $\Omega$   $\pm 1\%$  Resistor to 8 kV
- MM: 200 pf  $\pm 5\%$  Cap & 0  $\Omega$  Resistor to 1 kV
- HMM: 150 pf  $\pm 5\%$  Cap & 330  $\Omega$   $\pm 5\%$  Resistor to 4 kV

Cabling included:

- HBM Cable Pair, Red/Black, 6" (152mm)
- MM Cable Pair, Yellow/Green, 6" (152mm)
- HMM Cable Pair, Blue/Orange, 6" (152mm)

DUT Socket Modules included:

- DIP: 2 to 40 pins (available with and without programming pins)
- SOIC: 16 pins
- SOIC: 28 pins

#### Optional:

- Custom Socket Modules up to 84 pins PLCC/CLCC, etc.
- Model 9903 Charge Device Model (CDM) Test Fixture
- Model 9902 Remote Discharge Probe (HBM & MM Only  $\pm 1$  kV)
- PinScan™ Automated testing system.