Shielded Bag Test Kit
PBT-531

Data Sheet

Electrostatic Shielded Bag Testing per ANSI/ESD STM11.31 and IEC 61340-4-8

The PBT-531 is a complete system kit designed to evaluate the performance of electrostatic discharge shielded bags and other packaging materials. The portable shielded bag test system is capable of calculating the energy of the discharge pulse inside the shielded bag in accordance with ANSI/ESD STM11.31 and IEC 61340-4-8.

Specifications for the PBT-531 Shielded Bag Test Kit

PDS-510 HBM Discharge Simulator	
Discharge Output	Adjustable up to 4kV
Power Supply Output	Adjustable up to 4kV
Power Supply Accuracy	±2%
Discharge Waveform ANSI/ESD STM11.31	Rise time @ 0Ω: <10 nsec @ 500Ω: <20 nsec Fall time @ 0Ω: 150±15 nsec @ 500Ω: 200±20 nsec Ringing: <15%
Power	**Batteries:** 4 each AA 2600 mAh low self-discharge, Rechargeable, Nickel-Metal Hydride Battery Power Supply: From 90VAC to 264VAC, 47Hz to 63Hz. UL and TUV 60950-1 approved.
Battery Life	> 100 hours (with average of 50 discharges in 8 hours)
Dimensions	7.5"L x 4.5"W x 2.5"H (19.05cm x 11.43cm x 6.35cm)
Weight	2.0 lbs (907g)
PBF-520 Shielded Bag Fixture	
Base Material	Flame Retardant Polycarbonate
Surface Resistivity	>$1x10^{13}$Ω
Discharge and Ground Electrodes	1.5" (3.8 cm) brass, gold plated
Capacitive Probe	0.830" (2.1 cm) brass, gold plated
Capacitance	Nominal 8pF
High Voltage Resistor	500 Ohms, 1% tolerance
Support Area Surrounding the Ground Electrode	8x10" (20x25cm) - *without Base Extension attached* 8x15" (20x35cm) - *with Base Extension attached*
Dimensions	11"L x 8"W x 4"H - *without Base Extension* 6"L x 8"W x 1"H - *Base Extension*
Weight	3.0 lbs (48 oz) - *without Base Extension* 1.0 lbs (16 oz) - *Base Extension*
Tektronix® CT1 Current Probe - Includes Attenuator	
Bandwidth	1 GHz
Sensitivity (into 50Ω)	5mV/mA
Accuracy	±3%
Cable Length	40" (1 meter)
PicoScope® Oscilloscope	
Bandwidth	200 MHz
Sampling Rate	Up to 1 GS per seconds
PC Connectivity	USB 3.0 SuperSpeed (USB 2.0 compatible). USB cable included.
Power Requirements	Powered from a single USB 3.0 port or two USB 2.0 ports. 4-channel models: AC adaptor included for use with USB ports that supply less than 1200 mA
Software Included	PicoScope 6 for Microsoft Windows 7, 8 and 10; 32-bit and 64-bit