## thermoscientific

DATASHEET

## Thermo Scientific MK Series Tester Comparison

Features	Thermo Scientific <sup>TM</sup> MK.1 Low Pin Count ESD and Latch-Up Test System	Thermo Scientific <sup>™</sup> MK.2 ESD and Latch-Up Test System	Thermo Scientific <sup>™</sup> MK.4 ESD and Latch-Up Test System
Design Base	High Speed Relay	High Speed Relay	High Speed Relay
JEDEC & ESDA HBM & MM	Yes	Yes	Yes
JEDEC JESD78 Latch-Up	High Speed Relay	Yes (Vector option)	Yes (Vector option)
Transient LU (ESD Induced)	Yes	Yes	Yes
Cable Discharge Method	No	No	No
Electrical Overstress Test	No	No	No
Preconditioning Vectors for Latch-Up	Not available	10MHz, 64K Depth	10MHz, 256 Depth
Clock Generator	No	No	No
Discharge Waveforms/software selectable	Built in HBM & MM	Built in HBM & MM	Built in HBM & MM
Maximum Pin Count (Channel)	256	768	2304
Pin Counts	64, 128, 192, 256	128, 256, 384, 512, 768	1152, 1728, 2304
DUT V/I Supplies	3	5	7
VI Supply Configurations	100V/1A(30V/5A)	100V/1A(30V/5A)	100W (10V/10A – 100V/1)
Maximum DUT V/I Voltage	100V	100V	100V
Maximum V/I Current	5A/30V - 1A/100V	5A/30V - 1A/100V	10A/10V - 1A/100V
Maximum Latch-Up V/I Source	100V	100V	100V
Maximum Latch-Up V/I Current	2A per pin	2A per pin	2A per pin
Accuracy of V/I Reading	Excellent (4 wires)	Excellent (4 wires)	Excellent (4 wires)
Maximum ESD Discharge Rate	10 Pulses/Sec.	10 Pulses/Sec.	10 Pulses/Sec.
Multi-Socket Capability	Up to 8 for ESD/Latch-up	Up to 8 for ESD/Latch-up	Up to 12 for ESD/Latch-up
Simultaneous ESD Stressing of Socket	Yes up to 8 sockets	Yes up to 8 sockets	Yes up to 12 sockets
Dimension HxWxD (cm)	91.4x57.9x77.5	91.4x57.9x77.5	127x60x99
Foot-Print (cm)	57.9x77.5	57.9x77.5	60x99
Accept ZapMaster Test Fixtures?	Use directly on system	Optional adapter	Optional adapter
Accept V3 Test Fixtures?	Yes, with optional adapter	Yes, with optional adapter	Yes, with optional adapter
Scimitar Operating System?	Yes	Yes	Yes
HBM Voltage to 12kV	No	Optional	No

