

# KeyTek EMC Immunity Test System

## SELECTOR GUIDE

Standards	Test Purpose & Description	MiniZap®	CEMASTER®	EMCPro™	ECAT®	G-STRIP™
IEC 1000-4-2 Electrostatic Discharge	Requirements for simulating human ESD. Contact mode preferred for direct ESD; contact mode only for indirect ESD	15kV air 8.8kV contact	8.8kV air 4.4kV contact	8.8kV air 4.4kV contact	15kV air 8kV contact	*
IEC 1000-4-3	Radio frequency radiated immunity test (Pre-Compliance)	*	*	*	*	100kHz to 1GHz
IEC 1000-4-4 Electrical Fast Transients	Requirements for simulating “sanitized” showering arc, on both power and I/O (data and signal) lines	*	2.5kV	4.4kV	8kV	*
IEC 1000-4-5 ANSI C62.41 Surge 1.2/50µs, 8/20µs Combination Wave Category B	Requirements for simulating surges on both power and I/O (data and signal) lines	*	2.5kV	6kV	22kV	*
IEC 1000-4-5 Surge 10/700µs Telecom Wave	Requirements for simulating surges on telecommunication lines	*	*	6.6kV	7kV	*
IEC 1000-4-6	Radio frequency conducted immunity test (compliant)	*	*	*	*	IEC levels 1, 2 & 3 to 10V
IEC 1000-4-8 Power Frequency Magnetic Fields	Magnetic fields generated by AC power mains	*	30A/m	30A/m	*	*
IEC 1000-4-9 Pulse Magnetic Fields	Simulates pulsed fields found in power stations, substations and other environments where very high transients occur	*	800A/m	1000A/m	> 1000A/m	*
IEC 1000-4-11 Dips and Interrupts	Simulates voltage fluctuations of the mains	*	70%, 40%, 0% short and open	70%, 40%, 0% short and open	150%, 120%, Dips 110%, 100%, 90%, 80%, 70%, 40%, 0% short and open	*
ANSI C62.41 Surge Ring Wave Category A, B	Requirements for simulating 100kHz ring wave	*	*	6.6kV	6.6kV	*
EN55011, EN55022, EN55014, FCC Part 15	Radio frequency radiated emissions testing (pre-compliance)	*	*	*	*	100kHz to 1GHz
CCITT Rec. K.17, K.20, K.21 Surge 10/700µs Telecom Wave	For qualifying telecom repeaters, central office and station (i.e., subscriber) equipment	*	*	6.6kV	7kV	*
UL 1449 Surge Combination Waves	Qualification tests for AC powerline protectors. Three levels of 6kV combination wave required: 3kA, 750A and 500A	*	*	3kA	3kA, 750A, 500A	*
FCC Part 68 Telecom	For qualifying telecom equipment: specifies surge tests on telecom lines	*	*	9/720µs waveform, 1000V only	9/720µs waveform, 1000V; 10/160µs waveform, 1500V; 10/560µs waveform, 800V	*
FCC Part 68 Power Lines	For qualifying telecom equipment: specifies surge tests on power lines	*	*	*	2/10µs waveform, 2500V	*
GR-1089-CORE Bellcore	Surge test requirements for telecom equipment installed in various locations	*	*	*	2/10µs waveform, 800V, 1500V, 5000V (AC mains)  10/360µs waveform 1000V  10/1000µs waveform 600V, 1000V, 1500V	*