



# Advanced Test Equipment Rentals

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## KeyTek ECAT® Model E515

Module to produce the 10/250μs surges required by Telcordia GR-1089-CORE



### ELECTRICAL

Waveform	<10/>250μs, 200-4000V -0/+16% peak open-circuit voltage; 100-2000A -0/+16% peak short-circuit current.
Front Time Tolerance	-60%/+0 for voltage; -30%/+0 for current
Duration Tolerance	-0/+60% for voltage; -0/+20% for current
Surge Repetition Rate	1 shot/126 seconds 0 to 4kV range 1 shot/63 seconds 0 to 2kV range
Minimum System Requirements	E100 series control center
Options	E515-VI - adds voltage and current monitoring

## KeyTek ECAT® Model E518

Plug-in module to produce the 10/1000μs waveforms to 2kV as required by Telcordia GR-1089-CORE for both Lightning Surge and Protection Coordination. Includes HB-ECAT.

### ELECTRICAL

Waveforms	10/1000μs, 50-600V -0/+15% peak open-circuit voltage; 100A/side -0/+15% peak short-circuit current
	10/1000μs, 50-1000V -0/+15% peak open-circuit voltage; 100A/side -0/+15% peak short-circuit current
	10/1000μs, 50-2000V -0/+15% peak open-circuit voltage; 100A/side @ 1kV; 200A/side @ 2kV -0/+15% peak short-circuit current

NOTE: All voltage and current specifications are minimum values, in accordance with Telcordia GR-1089-CORE

Outputs are all true three-terminal outputs for testing either two or three-terminal devices or inputs. Outputs can be connected in parallel to double the available peak short-circuit current when testing two-terminal devices.

Front time tolerance -30%/+0%

Duration tolerance -0/+50%

Surge repetition rate 1 shot/40 seconds at 600V and 1kV; longer charging times at higher voltages

Minimum System Requirements: E100 series control center

Options E518-VI - adds voltage and current monitoring

## KeyTek ECAT® Models E521 and E522

Surge systems that produce the high voltage, high current combination waves required by ANSI standards for service entrance and outside connected electronics; meets requirements of IEC 61000-4-5 for all exposure categories. **ECAT Model E521** includes built-in AC coupler/decoupler for single-phase lines to 480V, 32A; **ECAT Model E522** includes built-in AC coupler/decoupler for three-phase lines to 480V, 32A/phase (actual AC mains current per AC line connector limits).

### ELECTRICAL

Open-Circuit Voltage	1.2/50μs, 200V to 20.2kV ±10%
Short-Circuit Current	8/20μs, 100A to 10.1kA ±10%, with 2 ohm effective source impedance. With a 12 ohm effective source impedance, the peak short-circuit current = open-circuit voltage ÷ 12
Rise Time Tolerance	±30% for voltage; ±20% for current
Duration Tolerance	±20% for voltage and current
Surge Repetition Rate	1 shot/30 seconds @ <=10kV 1 shot/minute @ >10kV
Line Sync Accuracy:	±5°
Minimum System Requirements:	E100 series control center
Options	E521-VI - adds 3-wire VI monitoring plus automatic software selection to Model E521  E522-VI - adds 5-wire VI monitoring plus automatic software selection to Model E522

## SURGE COUPLER/DECOPULERS

### KeyTek ECAT® Model E551

A single-phase AC line (power lines) coupler/decoupler for surge waves, as specified by IEC 61000-4-5.

### ELECTRICAL

Voltage	250V rms AC, single-phase
Current	16A continuous with appropriate connectors (i.e. Schuko or other) 15A continuous with NEMA 5-15 style connector used in the U.S.A.
Coupling Mode Selection	Coupling mode selection is programmable - manually from the control center, or automatically using KeyTek SurgeWare™ software.
Monitoring	Monitoring and peak detection of surge voltage across any two manually-selected lines. Monitoring can be at the EUT or at the front panel of the coupler/decoupler.
	Monitoring and peak detection of surge current in either High or Neutral, selected by the ECAT Control Center or the computer, measured without including back-filter surge current.
Minimum System Requirements:	E100 series control center and AC mains surge network
Options	E551-DC - allows use of surge coupler/decouplers on DC power mains