

## SYSTEM FEATURES



- Provides surge protection against harmful transients traveling on data and communications lines.
- Compact footprint allows for installation flexibility
- 10-Year Unlimited Free Replacement Warranty
- Two, Four, Six, Eight and Ten wire units.
- 10V, 15V, 24V, 48V, & 120V configurations.
- Install on data and signal lines carrying <400mA current with a max data rate of 10Mbps. For power applications over 400mA use LT series.

## PRODUCT SPECIFICATIONS

### GENERAL SPECIFICATIONS

**Maximum Rated Surge Current:** 18kA per pair  
**Applications:** RS232, RS422/423/485 data, 4-20 mA current loop circuits and signal lines  
**Design:** Multistage hybrid fail-safe design  
**Warranty:** 10-Year Unlimited Free Replacement

### ELECTRICAL SPECIFICATIONS

**Strength:** 18kA per pair; 9kA per wire  
**Maximum Operating Frequency:** 50MHz  
**Maximum Continuous Amperage:** 400mA  
**Mode of Protection:** Line-line and line-ground.  
**Options:** RJ-45 connectors—add suffix “RJ” (available for units with 8 wires only)  
**Response Time:** < 1 nanosecond  
**Number of Protected Circuit:** 1-5 pair (2-10 wire)  
**Series Resistance:** 2.4 ohm per wire

### MECHANICAL SPECIFICATIONS

**Dimensions (approx):** Two enclosure sizes depending on the number of circuits  
**Case A (1-2 pair):** 2.885”H x 2.130”W x 1.130”D  
**Case B (3-5 pair):** 4.375”H x 2.885”W x 1.230”D  
**Enclosure Type:** High-impact, non-metallic UL 94-5V flame resistant rated  
**Connection Method:** Screw terminal connector; #12-30 AWG  
**Mounting Method:** All units come standard with a universal mounting bracket that allows the units to be screw or Din-Rail mounted (horizontally or vertically).  
**Operating Temperature:** -40° C to 85° C (-40° F to 185° F)  
**Weight:** 0.50 lbs.—0.75 lbs. (0.23 kg—0.34 kg) depending on number of circuits.



### SLP PERFORMANCE SPECIFICATIONS

Model Number	Protection Mode	MCOV (peak)	Max Data Rate	Let-Through Volt IEC 10 x 700 μs Impulse 2kV / 80A	Let-Through Volt ANSI/IEEE C3 Impulse 20kV / 10kA
TK-CT2-120SLPx	L-L	130V	10Mbps	180V	160V
	L-G	130V		180V	160V
TK-CT2-48SLPx	L-L	56V	10Mbps	65V	62V
	L-G	56V		65V	62V
TK-CT2-24SLPx	L-L	35V	10Mbps	38V	41V
	L-G	35V		38V	41V
TK-CT2-15SLPx	L-L	15V	10Mbps	41V	39V
	L-G	15V		41V	39V
TK-CT2-10SLPx	L-L	10V	10Mbps	24V	22V
	L-G	10V		24V	22V

All voltages are peak values (+10%). Test environment: static, positive polarity, time base = 1 ms  
x = 2 for 2 wire, 4 for 4 wire, 6 for 6 wire, 8 for 8 wire and 10 for 10 wire.  
Specifications subject to change without notice, see web site [www.tpsurge.com](http://www.tpsurge.com) for latest revisions.

### SLP AVAILABLE CONFIGURATIONS

Model Number	Number of Wires	Applications
TK-CT2-120SLP2	2	120V Control/Signal Circuit
TK-CT2-120SLP4	4	
TK-CT2-120SLP6	6	
TK-CT2-120SLP8 <sup>1</sup>	8	
TK-CT2-120SLP10	10	
TK-CT2-48SLP2	2	48V 4-20mA Current Loop
TK-CT2-48SLP4	4	
TK-CT2-48SLP6	6	
TK-CT2-48SLP8 <sup>1</sup>	8	
TK-CT2-48SLP10	10	
TK-CT2-24SLP2	2	RS232 and 24V 4-20mA Current Loop
TK-CT2-24SLP4	4	
TK-CT2-24SLP6	6	
TK-CT2-24SLP8 <sup>1</sup>	8	
TK-CT2-24SLP10	10	
TK-CT2-15SLP2	2	Circuit rated at 15V or below, such as RS485 Data
TK-CT2-15SLP4	4	
TK-CT2-15SLP6	6	
TK-CT2-15SLP8 <sup>1</sup>	8	
TK-CT2-15SLP10	10	
TK-CT2-10SLP2	2	Circuit rated at 10V or below, such as RS422, RS423
TK-CT2-10SLP4	4	
TK-CT2-10SLP6	6	
TK-CT2-10SLP8 <sup>1</sup>	8	
TK-CT2-10SLP10	10	

<sup>1</sup>RJ-45 option available for 8 wire units - add “RJ” suffix