

## 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
- Fail-safe design
- 24V, & 48V 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:** 9kA per pair

**Applications:** 4-20mA Current loops, signal lines, data-lines, transducers, flow meters, and low voltage control circuits

**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.

**Response Time:** < 1 nanosecond

**Number of Protected Circuit:** 1 (2 Wires)

**Series Resistance:** 2.4 ohm per wire

### MECHANICAL SPECIFICATIONS

**Dimensions (approx.):** 4.25"H x 1.1"W x 1.0"D

**Enclosure Type:** Stainless steel type 316L 1/2" conduit pipe and cap models with NPT threads. Unit made for Nema 4X corrosive environments.

**Operating Temperature:** -40° C to 85° C (-40° F to 185° F)

**Weight:** 1.0 lbs. (0.45 kg)

### SCP PERFORMANCE SPECIFICATIONS

Model Number	Protection Mode	MCOV (peak)	Max Data Rate	Let-Through Volt IEC 10 x 700 $\mu$ s Impulse 2kV / 80A	Maximum Operating Frequency
TK-CT2-24SCP2	L-L	35V	10Mbps	50V	50MHz
	Shield-G	35V		50V	
TK-CT2-48SCP2	L-L	56V	10Mbps	62V	50MHz
	Shield-G	56V		62V	

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.

### AVAILABLE CONFIGURATIONS

Model Number	Number of Circuits	Applications
TK-CT2-24SCP2-CAP	1	24V Current Loop Prewired with Capped One End
TK-CT2-24SCP2-FT	1	24V Current Loop Prewired at Both Ends
TK-CT2-48SCP2-CAP	1	48V Current Loop Prewired with Capped One End
TK-CT2-48SCP2-FT	1	48V Current Loop Prewired at Both Ends

