



## TSP-10 Phone Line Surge Protector

A surge protector is an appliance designed to protect electrical devices from voltage spikes. A surge protector attempts to regulate the voltage supplied to an electric device by either blocking or by shorting to ground voltages above a safe threshold. The TSP-10 will ensure the reliable operation of POTS based equipment such as telephones, FAX machines and dialup modems.

- protect FAX and dialup modems from surges on telephone lines
- Control transient over voltage to a low level to ensure maximum protection for your equipment
- LED indicator flashes for ring indication and lights during device off-hook operation

### Specifications

Surge current	8 x 20u sec of 500A
DC spark over voltage	160 ~ 240VDC

Dimensions	80 x 30 x 27mm (D x W x H)
Weight	20g
Compliance	UL 1449 (2nd Edition)

### Ordering Information

Model Name	Description
TSP-10	In Line Telephone Surge Protector with RJ-11 Jacks



## SP-SE-B01 E1 Surge Protector

A surge protector is an appliance designed to protect electrical devices from voltage spikes. A surge protector attempts to regulate the voltage supplied to an electric device by either blocking or by shorting to ground voltages above a safe threshold. The SP-SE-B01 will ensure the reliable operation of coaxial based networking equipment running ArcNet, Satellite/CCTV and 75 ohm E1 communication systems.

- Protect E1 Access Units using coaxial cable from transient surge voltages
- Compact in-line installation
- Low shunt capacitance to reduce signal loss
- Maximum system up time
- State of the art, avalanche diode technology

### Specifications

Type	SP-SE-B01
Connection	BNC
Un	10V
U-max	18V

Discharge current	10KA
Response time	< 10ns
Insertion loss (40MHz)	0.5dB
Dimensions	38 x 68 x 27mm (D x W x H)
Weight	70g
Compliance	IEC 61644-1, draft 98

### Ordering Information

Model Name	Description
SP-SE-B01	75 ohm, BNC, 1 port Coax cable surge protector



## SP-V35-01 V.35 Surge Protector

The SP-V35-01, V.35 Data Line Surge protector, prevents damage to V.35 data ports and data errors due to electrical surges. These surges originate from a wide variety of sources, including lightning strikes, static charge buildup, electric motors, fluorescent lights or the normal AC power protection equipment. Data line transients can be damaging to V.35 hardware. The surge protector intercepts harmful data line transients and diverts them safely to chassis ground through a grounding wire. The SP-V35-S01 plugs directly into an M/34 data port. All standard data, clocking and control signals on the ITU-T V.35 interface are protected. The SP-V35-S01 uses sophisticated circuits, which allow the unit to operate at the data rates up to 10 Mbps. The SP-V35-S01 can take repeated surge "hits" without degrading in performance or letting harmful energy through to the data port.

- Standard V.35 data Lines on the M/34 cable adapter
- Data Rates up to 10 Mbps
- Plugs Directly into V.35 Port (One Male, One Female M/34 cable adapter)
- Diverts Harmful Transients to Chassis Ground through Braided Metal Strap
- Able to take Repeated Surges without Degrading in Performance
- Prevents equipment in case of a Severe Surge
- Surge Handling Capacity of 1,500 Watts

### Specifications

Interface	V.35
Maximum Data Rate	10 Mbps
Connectors	<ul style="list-style-type: none"> <li>• 34-pin M-block male</li> <li>• 34-Pin M-block female</li> </ul>
Leads/Signals Protected	All V.35 leads/signals
Capacitance	< 40pF
Maximum Surge Protection	(Current, 8 x 20 μs at Standard Clamp Voltage) 370 amps
Standard Clamp Voltage	30 volts
Series Resistance	None

Temperature	- 40 ~ 85°C
Humidity	10 ~ 90% relative, non-condensing
Dimensions	120 x 52 x 30 mm (D x W x H) plus 50 cm of cable (fully extended) on either side for a total length 70 cm
Weight	300g

### Ordering Information

Model Name	Description
SP-V35-01	V35 Data line surge protector

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.