



# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

### TELCO/T1/CSU/DSU SURGE PROTECTORS

*Get custom protection for your high-speed data lines.*

TELCO/T1/CSU/DSU SURGE PROTECTORS									
Connector Type	Wires Protected	Dialup Modem/Fax	10BASE-T 100BASE-T Ethernet	Token Ring	RS-232	T1 Nonspan	DDS	ISDN	T1
RJ-11	4 centre pins	SP365A-R2*	SP528A		SP515A-R2				
RJ-45	3, 4, 5, 6 (4 center pins)	SP365A-R2		SP522A-R2				SP050A	
	1, 2, 7, 8						SP527A		
	1, 2, 4, 5							SP513A-R2	SP526A
	All pins		SP512A-R3			SP513A-R2		SP060A	
<b>Standard Clamping Voltage</b>		240 V	7.5 V RJ-45: 18 V	RJ-11: 27 V	RJ-11: 27 V RJ-45: 18 V	60 V	60V	60V	60V

\*2 center pins

### Key Features

- ▶ **State of the art avalanche diode.**
- ▶ **Compact in-line installation.**
- ▶ **High-speed, high-energy handling capability.**
- ▶ **Low shunt capacitance to reduce signal loss.**

With the Telco/T1/CSU/DSU Surge Protectors, you get custom protection for your high-speed data lines. These protectors will guard your networks against lightning-induced data surges, ground spikes, electrostatic discharge, and AC power interference.

High-speed avalanche-diode technology used in conjunction with low-capacitance circuitry enables these protectors to function at a greater bandwidth than other protectors—without signal degradation.

Just plug the Surge Protector between you're incoming data line and the I/O port of the device

you're safeguarding. Then anchor the ground wire to the equipment's grounded metal chassis. Remember, the device you are protecting needs to be attached to a properly grounded AC outlet.

Our complete line of Surge Protectors offers protection for all types of communication lines: dial modem/fax, 10BASE-T and 100BASE-T, Token Ring, RS-232, T1, and DDS. Choose the one that fits your connection.

### Ordering Information

ITEM	CODE
Telco RJ-11 Surge Protector .....	SP365A-R2
10BASE-T Hub Surge Protectors, RJ-45 1-Port.....	SP512A-R3
RS-232 Surge Protector, RJ-11 .....	SP515A- R2
Token Ring Surge Protector, UTP RJ-45.....	SP522A-R2
T1 Non-Span Surge Protector .....	SP513A-R2
T1 Surge Protector, RJ-45 .....	SP526A
DDS Surge Protector, RJ-45 .....	SP527A
ISDN-U Data Line U.....	SP050A

### Specifications

**Maximum Data Rate** — 1.544 Mbps  
**Clamp Voltage** — 60  
**Interface Type** — DSXI  
**Rated Current** — PPC peak pulse current = 200A

**Cord Length** — Equipment-side 10-cm ground cord  
**Response Time** — < 10 ns  
**Enclosure** — Plastic  
**Size** — 3.8 x 9.1 x 2.3 cm