



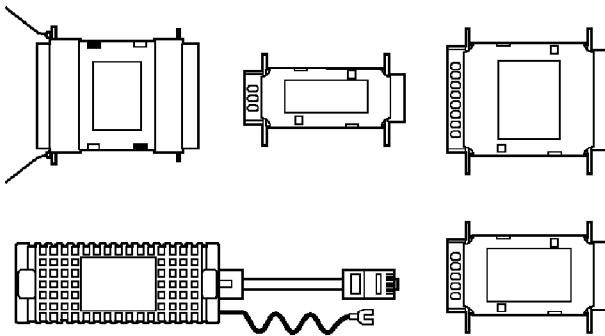
BLACK BOX[®]

© Copyright 1994. All rights reserved.
Black Box Corporation.

The Source for Connectivity[®]

RS-232 & RS-422 Surge Protection For serial, parallel or LAN communications ports.

Protect your sensitive data ports from glitches,
damage and disruption!



Are your network users losing productive work time to unexplained system lockups? Are your network devices (I/O cards, concentrators, muxes, short-haul modems) randomly failing?

Now you can prevent the nuisance of an unreliable network by protecting your data lines with Port Protectors.

1000 times more susceptible than the power connection!

Surges enter electronic equipment through the network cable as well as the power cord. Even if you have an AC power

protector in place, surge energies as low as 15 volts generated within your building by sources such as fans, air conditioners, elevators, and nearby lightning strikes can cause your AC power protector to suddenly discharge surge energy into the network ground. It's just like a pressure relief valve. The result is lock-ups, equipment damage, and loss of network reliability.

Sensitive protection at the port—where it counts!

The location where a protector is physically installed is very critical to its ability to protect your equipment. Damage can still occur to computing equipment with as little as 18 inches of wire between the protector and the equipment. Beware of other protectors that combine the data line protector into the same enclosure as the power protector. They cannot be physically installed close enough to the sensitive port to afford enough protection.

Incredibly easy to install!

Simply insert the protector in series between the incoming data cable and the network port on the equipment being protected. Then attach the protector's grounding wire (if one is supplied) directly to the metal chassis of the equipment.

Automatically resets itself after each surge!

The protectors are designed to reset themselves ensuring that they will always be ready surge after surge. If the protector is exposed to more than its rated energy, it will take the network off line, keeping it protected from any subsequent energy.

Protection available for virtually any type of system or connector!

Standard models protect RS-422, RS-232, RS-423, RS-485, Ethernet, Token Ring, ARCNET[®], Parallel Ports, and most other Data-communications interfaces.

Special units are available for virtually any type of network, special connector, or pin configuration. Contact your authorized sales representative for more details.

Network Type and Part Number Selection

Connector type	RS-232	RS-422, RS-423, RS-485	UTP Ethernet 10BASE-T	Token Ring	ARCNET	Parallel Port
DB9	SP361A-R2	SP514A	-	SP361A-R2	-	-
DB15	SP507A	SP508A	SP362	-	-	-
DB25	SP360A	*	-	-	-	*
RJ-21 Telco Style	SP510A	SP511A	SP511A	SP510A	*	SP511A
RJ-11	SP515A	*	*	*	*	*
RJ-45	SP521A	*	SP512A	SP521A	*	*
Centronics [®] 36-Pin Parallel	-	SP516A	-	-	-	SP516A

* Denotes special product is available. Contact sales representative.

Electrical Specifications

Connector type	RS-232	RS-422, RS-423, RS-485	UTP Ethernet 10Base-T	Token Ring	ARCNET	Parallel Port
Std. Clamp Voltage Vcl	18 Volts	7 Volts	8 Volts	18 Volts	30 Volts	7 Volts
Response Time	<10nS	<10nS	<10nS	<10nS	<10nS	<10nS
Max. Capacitance	<40pF	<40pF	<40pF	<40pF	<40pF	<40pF
Max. Current 8x20us@Vcl	370 Amps	750 Amps	750 Amps	370 Amps	340 Amps	750 Amps

Doc# 12142