



(1) What is Data Line Surge Protection and How Does It Work?

Data line surge protection devices are essentially high-speed, self-resetting switches designed to balance communication lines with chassis (earth) ground in the event lines become over-energized.

(2) Without Data Line Surge Protection, What Happens?

Surge events may damage or destroy modems, motherboards, serial ports, parallel ports, network interface cards and any other LAN equipment in their path.

(3) Does The Damage Go Deeper?

In the wake of surge destruction, the lasting hurt for any enterprise is equipment downtime, particularly point-of-sale locations and the loss of business transactions, orders, income, and customer goodwill. In many cases these are losses that are difficult, if not impossible, to recover.

(4) How Do Non-Power Data Lines Carry Surges?

Surges and any form of transient voltage must follow a "path." Data/telecom lines, though not designed to convey power, are prone to electrical occurrences that do seek a path. It's well known that surge protection is vital when connecting electronic equipment to power sources. However, what is lesser known is that even when power line surge protection suppresses one path, other paths (like data/telecom lines) become vulnerable and inviting. In other words, power surge protection may shut the "front door," but does nothing to guard against "back door" entry. There are several other phenomena that find data and telecommunication lines ever so inviting. Only specific data line surge protection will provide that security assurance.

(5) Geographically, Where and When Do Surges Occur?

Disturbances can happen anywhere. Historically, with its thunderstorm activity, lightning, high winds and related atmospheric conditions,

However, current nationwide conditions (i.e. power grid episodes, rolling blackouts, etc.) do not limit the scope of vulnerability.

(6) Isn't Equipment Today Built To Withstand Surges?

Actually, today's telecommunications, networking, electronics, etc. applications are far more sensitive and thus more prone to damage. And with the high cost of equipment (and the unrecoverable downtime costs) the need for data line surge protection has never been greater.

(7) Why Do You Need Data Line Surge Protection?

As new technologies drive more sophisticated applications into the marketplace, it is clear that protecting data and telecommunication equipment through the use of Data Line Surge Protectors is now more important than ever.

They are, in essence, high speed, self resetting switches designed to balance communication lines with chassis (earth) ground in the event the lines become over energized.

(8) Where Do Surge Energies Come From?

Destructive surge energies occur as a result of ground potential differences. Some typical examples are nearby lightning strikes, ESD (electrostatic discharge), EMI (electro magnetic interference), RFI (radio frequency interference), and induced over-voltages caused by copy machines, fluorescent lighting and even AC power protectors.

Example: A power line surge is clamped by the AC power protector to chassis (earth) ground. The surge energy seeks earth ground through any and all paths. The data cable is a path. The surge energy seeks earth ground through the data cable, damaging or destroying motherboards, modems, serial ports, parallel ports, network interface cards and any other LAN equipment in its path.