CTPX
Telecommunications, Inc.
www.ctpx.com

About Proper Telecom Equipment Protection...

- √ ***Protect Personnel from Hazardous Conditions***
- √ ***Protect Property from Destructive Events***
- √ ***Protect Business from Operating Interuptions***

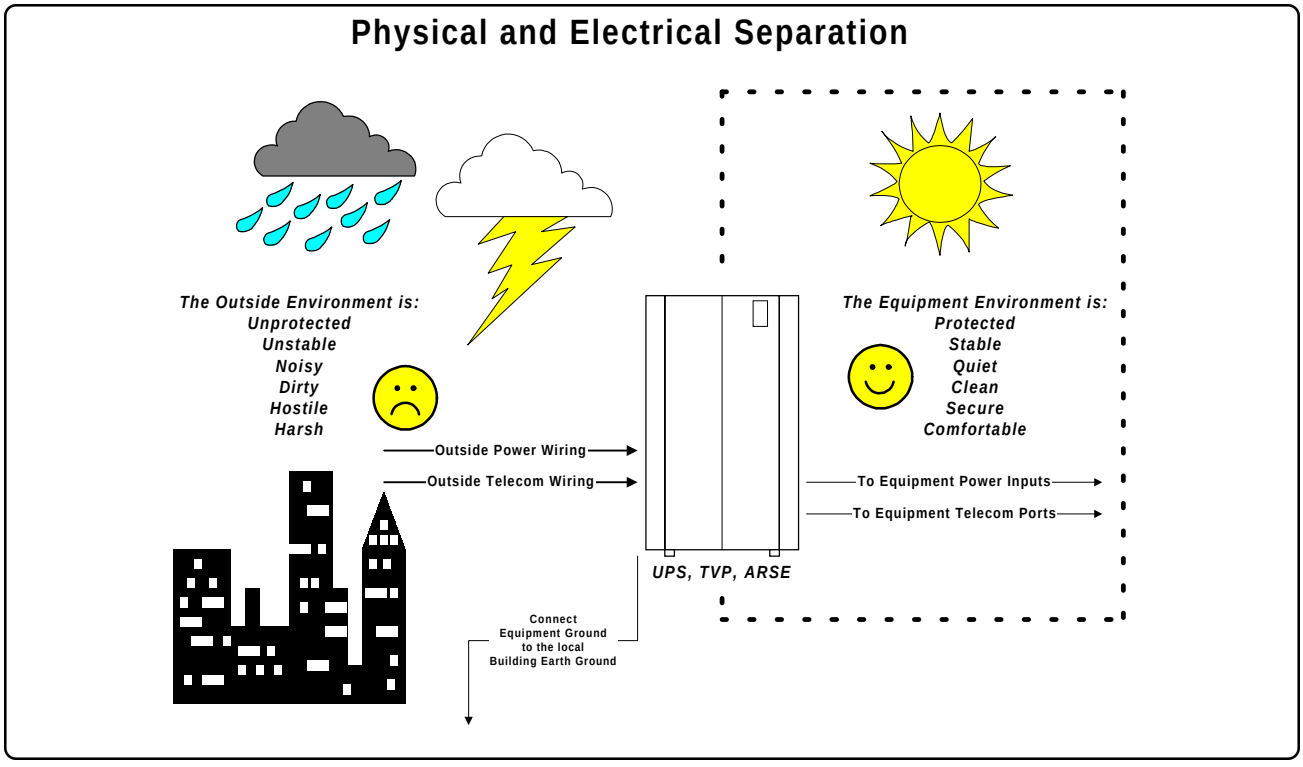
The outside telecom and power wiring runs through a harsh and hostile environment. Power lines and telephone lines are subject to the effects of lightning strikes and electro static discharges. Occasionally a high voltage power line crosses the telephone line and causes severe over voltage stress conditions. On top of that, the actual telecom equipment may be subject to human hostilities. Make sure that the electrical wiring conforms to all local and national building codes. Despite all efforts, even the best protection can not prevent damage from a direct lightning strike!

www.ctpx.com

How To Protect from:

Damage Due To Electrical Over-Stresses

Surge protectors prevent electrical over stresses from reaching the equipment. Good protection makes a lot of business sense. It is a form of low cost insurance. Every single wire coming from the outside environment that connects to the telecom equipment must route through the surge protector. These wires include power cords, telephone lines and coax cables. The telecom surge protector must be located very close to the un-interruptible power supply and both must be connected to the same ground point. Make sure that the UPS has an internal power surge protector. Very commonly a potentially destructive power surge occurs when the power comes back from a blackout. That's when consumers tend to loose their poorly protected electronic appliances. A simple UPS does not remove surges from telecom wiring!

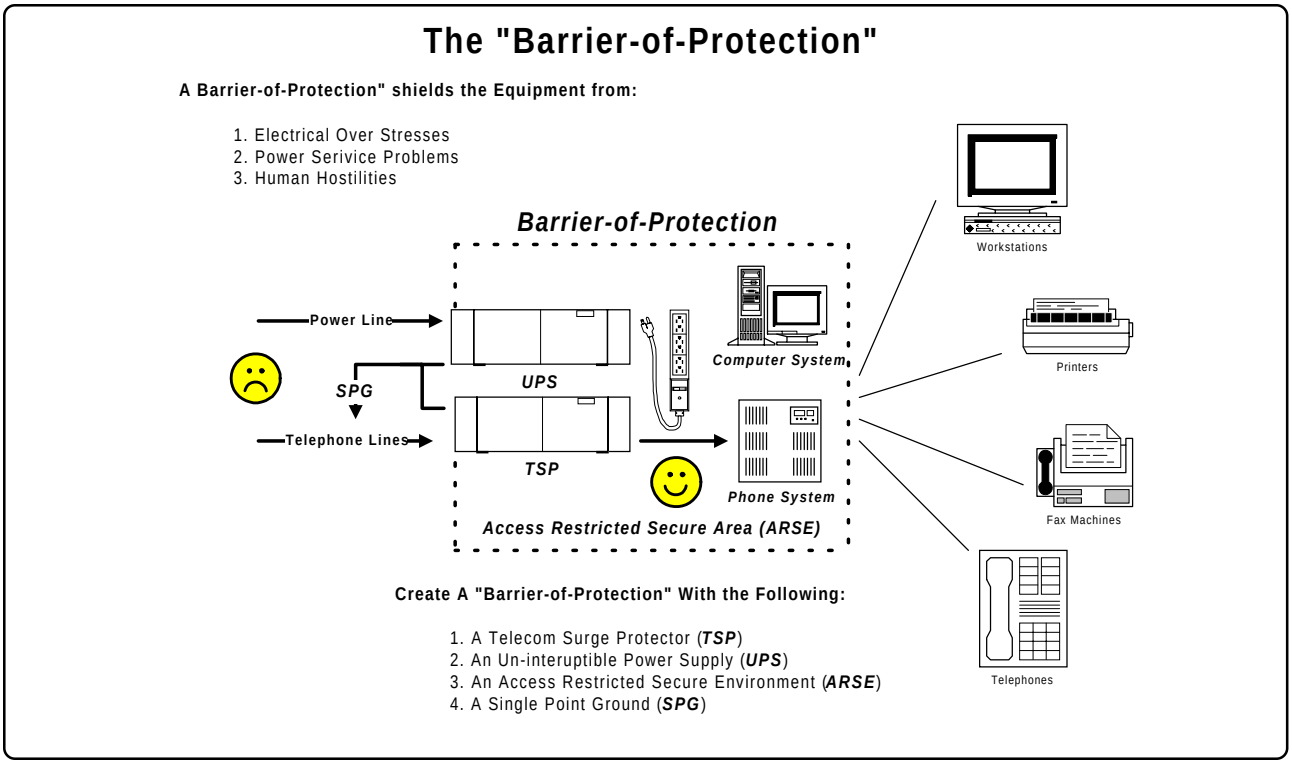


www.ctpx.com

How To Protect from:

Damage Due To Power Service Problems

Un-interruptible power supplies guarantee for a certain amount of time a steady flow of power to the equipment. Good grounding and proper equipment protection go Hand-in-Hand. An un-interruptible power supply alone does not shield the equipment from surges on the telecom wires and just having a telecom surge protector is no guarantee that it is going to be effective. A single point ground (SPG) arrangement is a must for proper surge protection. This is accomplished by connecting all equipment ground connections in a star configuration to the same point. The single point ground should be at the telecom surge protector but may be at the UPS, or at a multi-port power outlet strip that is connected directly to the UPS.



www.ctpx.com

How To Protect From:

Damage Due To Human Hostilities

In the recent years we heard about cases where employees have taken out their frustrations on unprotected telecom equipment resulting in visible physical damage to the equipment and/or invisible electrical equipment damage. In order to reduce cases of vandalism and sabotage, a physical barrier must be established to separate personnel and equipment. This barrier also prevents the occasional "Oops" when somebody inadvertently pushes an important equipment button or disconnects a vital cable connection.

An Access Restricted Secure Environment Reduces Vandalism and Sabotage:

- Limit Equipment Access To Authorized Personnel Only
- Restrict Common Personnel From Gaining Access To The Equipment Area
- Lock The Equipment In A Dedicated Area

Some Generally Accepted Access Restricted Secure Environments Are:

- Service And Maintenance Rooms
- Telephone And Supply Closets
- Steel Cabinets And Enclosed Racks

Provide the equipment with sufficient airflow/cooling and don't forget to keep it free of dust and vermin!

CTPX Telecommunications, Inc

901 Jefferson Avenue, Suite 301
Saint Paul, Minnesota, 55102, USA
http://www.ctpx.com
Phone: (651) 293-0535
Facsimile:(651) 225-4533
info@ctpx.com

www.ctpx.com