



## **Ground Loop Surge Filter**

This design drawing describes in detail how to diagnose and protect against ground current damage to electronic equipment during lightning strikes.

## Product #3 \*TPD-CAT6

Surge protect equipment and divert excess energy around equipment to power ground.

\*Use appropriate TPD Protector depending on your connection type and applications (DB9, SLP, CAT5E etc.)

**Breaker** 

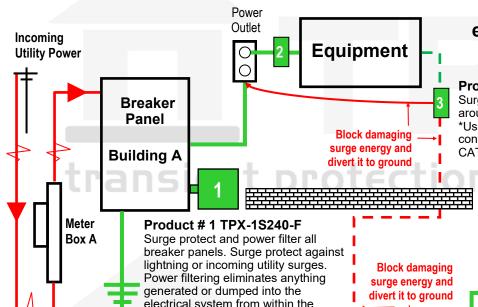
**Panel** 

**Building B** 

Meter Box B

**Building B AC Power** 

Ground



electrical system from within the

**Building A AC Power** Ground

## TPD-GLSF-P







Product # 2 TPD-GLSF Protect equipment communicating between buildings from damaging ground currents. Install the ground loop surge filter, plug in

**Equipment** 

type or hardwire, on equipment power cord or circuit. This filter absorbs and blocks high frequency ground currents traveling from one building ground to another building ground through your electronic equipment during lightning strikes.

**Note:** When separate breaker panels feed equipment that are communicating via data lines you have the potential for ground currents damaging your equipment during a lightning event. Although the potential for ground current damage is low when breaker panels are located near one another the chance for damage rises as the distance increases. Breakers panels that are separated by over 100 feet of cable can have different ground potential inside the home during a close proximity lightning strike. As breaker panel distances increase and/or leave the building the potential for lightning damage increases. The worst case scenario during lightning strikes is when the additional buildings have their own meter/separate ground.

For more information please contact technical support at 888-281-7856.

Need additional assistance? Call Technical Support 1-888-281-7856 info@TPDsurge.com www.TransientProtectionDesign.com

Depending on size, voltage and exposure level designers should refer to their product lists for a complete list of product options. If you do not have this list please email tim@tpdsurge.com for more information Drawings are not to scale and should only be used as a visual representation. Installation instructions should be followed for optimal performance and adequate grounding

