

Surge Information Tool



Surge Protection Information

What is a Surge Protective Device?

- A surge protector acts as a shield to deflect harmful surges to ground, away from critical equipment.

Why is Surge Protection needed?

- Prevents catastrophic damage that can cause long term downtime
- Filters out “mini-surges” that shorten equipment life

Determining if surge protection is needed:

1. Do you get frequent lightning storms?
2. Does your power flicker during thunderstorms?
3. Does equipment in your facility wear out prematurely?
4. Do you have vital equipment that could take days to repair if damaged by an electrical surge?

Common Misconceptions

1. We have not had damage from a surge
 - It's not *if*, it's *when*
 - Surge protection is insurance against a future threat
2. Our equipment is plugged into surge strips
 - Surge strips are neither designed for large events nor long term operation
3. It's expensive
 - How much would the repair expense of critical equipment cost?
 - How long would it take to repair and what would that downtime cost you?

Where is Surge Protection Installed?

1. *Service Entrance* – The point of entry for utility power. A unit installed here protects the facility from a large external event, such as lightning or grid switching.
2. *Mid-Level Distribution* – Closer to the critical piece of equipment. A unit installed here protects from internally generated surges and isolates the critical equipment from faults.
3. *Panel Board Distribution* – Installing surge protection on this equipment will extend its longevity by cleaning up mini surges that reduce equipment life.



What is the typical equipment?

1. *Service Entrance*
 - Typical voltage is 480/277VAC
 - Recommended model
 - JSP 400kA–240kA
2. *Mid-Level Distribution*
 - Typical voltage is 208/120VAC
 - Recommended models
 - JSP 240kA–120kA
 - Surgitron I Series
3. *Panel Board Distribution*
 - Voltage varies
 - Recommended models
 - JSP 120kA–60kA
 - TransEnd 80kA–25kA

How is it installed?

Surge protection can be easily hard wired to the appropriate switch gear panel by an electrician. The installation takes between 1–2 hours.

Warranty

- 3–10 years (model dependent) warranty
- Replacement even if unit sacrifices itself because of a surge event

Additional product information:

www.tnbpowersolutions.com/joslynsurge

