More about Surge Protection

All Clay Electric members need to be aware that power surges can damage or destroy their electronic equipment. Surge protection equipment will not protect against catastrophic lightning strikes, but it will protect your equipment up to its rated capacity against surges caused by lightning, storms and/or other events.

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Lake City District Office
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Orange Park District Office
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Orange Park, FL 32065
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Palatka District Office
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Palatka, FL 32177
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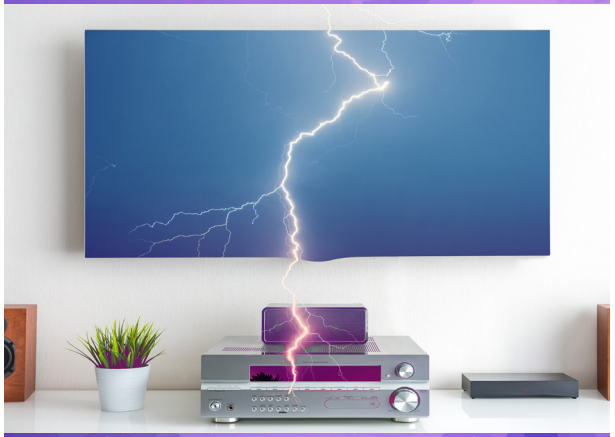
A Touchstone Energy® Cooperative

Published June 2025 by the Member & Public Relations Department

Surge Protection

Clay Electric's Surge Protection Program



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High quality surge protection for your sensitive electronics

In the heart of today's electronic equipment are powerful, sensitive microprocessors. These microprocessors react adversely to any changes in the power they receive. Even the shortest interruption of power will cause a microprocessor to lose track of the task it was performing- making clocks blink and erasing your computer's RAM memory. Abrupt increases in power voltage, called surges, can be both an explosive and a silent enemy.

Even a split-second change in voltage outside the normal range can scramble data saved in tiny, delicate silicon chips and circuit boards. High level surges can destroy the electronics in equipment. Low level surges slowly wear down microprocessors, causing equipment to fail for no obvious reason.

Surges in voltage levels are caused by many different events. Lightning is the most common culprit, but accidents involving power poles or birds, squirrels or other animals contacting power line equipment can also cause surges to be generated. Other causes include neighbors using large power equipment and normal utility equipment operations. Inside your home, surges can be caused by major appliances, large motors switching on and off, faulty wiring or poor grounding.

Since surges can be caused by so many things, most homes will experience power surges at one time or another. Clay Electric has devices in place on its power lines to keep surges from damaging its equipment and reaching customers' homes, but many surges cannot be stopped or prevented.

Protecting your electronic equipment from power surges and the damage they may cause makes sense, and the best way to get that protection is with a surge protection device.

The surge stops here

Surge suppressors are made to protect your electronic equipment by diverting surges away from sensitive electric circuits. Protecting your home appliances and electronic equipment requires a two-stage approach. Using two separate suppressors offers superior protection from both externally **and** internally generated surges.

In the Surge Protection program, the first step is a high energy surge suppressor professionally installed into your home's meter base. This suppressor will withstand surges greater than 60,000 amps.

To accompany the meter base suppressor, plug-in suppressor modules can be used to connect to individual pieces of equipment such as computers or home entertainment centers. These plug-in suppressors, rated to withstand up to 52,000 amps, protect against internally generated surges and provide further protection against external surges. (The plug-in module is not recommended for refrigerators or freezers.) Meter base surge protection is required prior to purchasing the plug-in module(s).

Our Surge Protection devices provide the highest quality surge protection, are UL-listed and meet the IEEE 587 standard for surge suppression equipment.

Surge protection may be purchased by Clay Electric members. Please see the current Surge Protection Price Guide for options and prices.

Plug-in modules are available for phone, satellite and cable connections.

The meter base suppressor is your first line of defense against power surges.

Meter base surge suppressor

Max. surge > 60,000 amps
Max. energy of 4,000 joules
Response time < 1 nanosecond
Thermal fused internally

Plug-in suppressor modules

Max. surge of 52,000 amps
Max. energy of 1,125 joules
Response time < 1 nanosecond
Thermal fused internally

In rare cases, certain electric meter configurations limit the application of surge protection equipment. In those cases, we may recommend against the purchase of this equipment and recommend other possible surge protection options offered by your local electrical and/or HVAC contractor.