

Panel-mounted Surge Protection

Your first line of defense is at the electric meter

Here, most voltage spikes transported by power lines can be reduced to a safe level right where it enters the building.

A panel-mounted surge protector installs at your electrical panel. It instantaneously responds to high voltage shocks to prevent damage and help protect your major appliances. However, not all power problems originate outside the building. To protect your electronic equipment such as computers, you need additional indoor outlet surge protection, such as plug strips available at local stores.

How to buy and install

A licensed [electrician](#) must help you install a panel-mounted surge

protector. Here are the minimum specifications to look for and discuss with your electrician:

UL1449 3rd Ed. Listed: The surge protection device must be listed for a type 1 or type 2 location (the location of the main electrical service panel). This standard protects against partial, direct, and indirect lightning strikes and will help achieve safe and reliable equipment performance.

Peak surge current rating: This is also referred to as maximum transient current or maximum surge. Look for an SPD with a rating of 50,000 amperes or higher per phase.

Voltage Protection Rating: When tested with a surge of 6kV @3KA the VPR should be 800 volts or less. The VPR rating shows how much of a 6,000-volt surge is allowed to pass the SPD protection.

Metal Oxide Varistor protection: MOVs redirect the electrical current in the event of a power surge. If the unit has a larger and multiple MOVs, it will provide more durable and longer-lasting surge protection.

Electrical noise protection:

- For electromagnetic interference (EMI)
- For radio-frequency interference (RFI)



Cost

Panel-mounted surge protection requires installation by a qualified electrician.

Costs can vary anywhere from \$300 to \$700 for materials and labor.

Consult an electrician for more information.

Phone and cable TV protection

To protect a TV, VCR, telephone, fax or computer, buy a surge protector with TV cable connectors and/or phone jacks.