

Why (and When) You Need to Replace Your Surge Protector



Surge protectors aren't like diamonds. They have a definite lifespan. At some point, your surge protector will stop protecting your gear from power surges and become a dumb power strip.

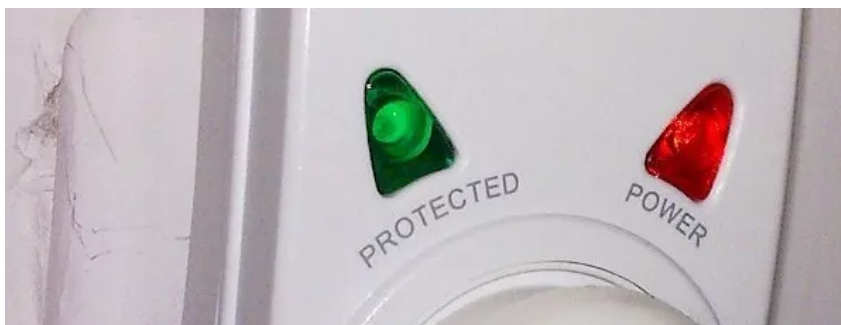
It's difficult to tell exactly when a surge protector loses those protective powers and just functions as a power strip. But, if you're still using an old surge protector you purchased ten years ago, it's probably long past time to replace it.

Surge Protectors 101

We've already outlined [why you want a surge protector](#). These devices sit between the electrical socket and your gadgets, protecting them from any power surges and ensuring they receive a consistent voltage of electricity. It's possible for a voltage spike caused by an issue in the power grid to damage your expensive electrical equipment, and that's what surge protectors are designed to stop.

Typical surge protectors also function as a power strip, providing additional electrical outlets for you. If you're connecting your computing equipment or home theater system, there's a good chance you'll want some electrical outlets anyway — so just pick up a power strip that's also a surge protector, not a simple power strip that only provides additional outlets without providing any protection.

Surge protectors are inexpensive, so they're a no-brainer when it comes to your expensive computing equipment and other electronic gadgets.



Surge Protectors Aren't Forever

Surge protectors aren't magic. When they receive a power surge from the electrical outlet they're plugged into, they have to do something with that extra voltage to get rid of it and shield the connected devices from it.

A typical surge protector uses a component called a metal oxide varistor (MOV). When the voltage spikes, the surge protector effectively diverts that extra voltage to the MOV component. This component degrades when it's exposed to either a small number of large surges or a larger number of smaller surges. The additional energy doesn't damage your

devices — it stays in the surge protector, where it degrades the MOV.

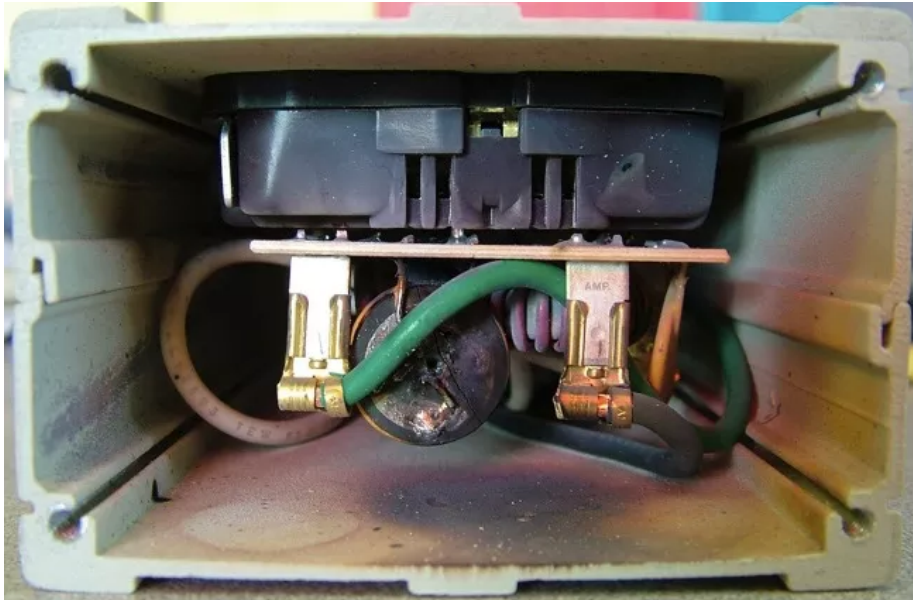
In other words, your surge protector can only absorb so many surges before it stops functioning as a surge protector and starts functioning as a dumb power strip that'll let everything through to your devices.

Their Lifespans Are Measured in Joules

Surge protectors are rated in joules, and this tells you how much protection they're designed to provide. For example, you might get a 1000 joule surge protector. This is a measure of a total amount of energy a surge protector can absorb before the protection wears out and it stops absorbing any extra voltage.

Every power surge your surge protector absorbs decreases the amount of future joules it absorbs. If that 1000 joule surge protector takes an 1000 joule hit, it's done for. But it's also done for if it takes ten 100 joule hits — or if it takes a thousand one joule hits. It's all cumulative.

Surge protector lifespans aren't measured in years — they're measured in joules. It's all about how many joules your surge protector has absorbed. But, the older your surge protector is, the more it's likely degraded.



How Can You Tell?

It's practically impossible to tell exactly when a surge protector stops functioning as intended. Some surge protectors have built-in lights that are designed to alert you to this problem and inform you when the protector needs to be replaced. However, you can't necessarily rely on these lights. It's not a foolproof system.

If your surge protector is warning you that it's no longer protecting you or asking you to replace it, you should probably get a new surge protector. But don't assume your decade-old surge protector is still working properly because the warning light hasn't come on yet.

So when is it time to replace that surge protector? Well, the longer it's been, the more at risk you are. If you know your surge protector has absorbed a serious power surge, you should probably replace it immediately.

There's no exact lifespan we can give you, and it varies from area to area — it depends how many surges occur in your area as well as how many joules your protector can absorb. Many people recommend replacing a surge protector every two years or so, but any recommendation like this one can only be a rule of thumb.

Image Credit: [Pelegs on Wikipedia](#), [Jungstruck on Flickr](#)

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