



An Extended Guide · No. 1757

How to Choose a Surge Protector

A plain-English buyer's
guide for plug-in protection

Tech Made Simple — Service Made Personal

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! Read this first — two kinds of protection, one safety rule

There are two kinds of surge protection in this guide, and they are not the same job. A whole-home surge protector wires into your electrical panel, where the power is always live and a mistake can be deadly — that is strictly a licensed electrician's work, almost always with a permit, and never a do-it-yourself project. (It isn't something I do myself, either; I help you understand it, choose wisely, and line up a trustworthy local pro.) The other kind — the surge-protector strips and plug-in units you use at the wall — are perfectly safe for you to set up on your own. One honest note either way: no surge protector is a lightning rod or an iron-clad guarantee, so in a violent electrical storm, unplugging a treasured device is still the surest protection of all. This is a buyer's guide for the plug-in surge protectors you choose and set up yourself; the whole-home unit at the panel is a licensed electrician's job, covered in our whole-home guide.

Let's pick the right surge protector together

Standing in the store aisle or scrolling online, the choices all look alike and the packaging is full of numbers. Let me help you cut through it and choose well, in plain English.

I'm Bill, and I run Bill's Home Tech here in Portage County. Choosing a surge protector is one of those small decisions folks worry about more than they need to. By the end of this guide you'll know exactly what to look for — and what to ignore.

We'll go feature by feature, match the protector to what you're actually protecting, and cover the practical bits like cord length and where to place it. No brand names, no sales pitch — just what matters and why.

★ I sell nothing, so this is honest advice

I don't sell surge protectors and earn no commission on any brand. That means I've got no reason to steer you anywhere but right. Call or text me at (330) 200-8042 if you'd like a hand choosing.

The whole guide, on one page

If you remember just this short list, you'll choose a good protector with confidence.

- ❑ Make sure it actually says 'surge protector' — not just 'power strip.' A plain strip offers no protection at all.
- ❑ Look for a joule rating: higher generally means more capacity and a longer life — but don't chase a single number.
- ❑ Want an indicator light, ideally both a 'protected' light and a 'grounded' light, so you know it's working.
- ❑ Get enough well-spaced outlets for your bulky plugs, and data jacks (coax, ethernet, phone) if you need to guard those lines.
- ❑ Check for a warranty, read the fine print on any connected-equipment guarantee, and look for a UL-listed safety mark.
- ❑ Match it to the job: sensitive electronics deserve a better protector or a UPS; a bedside lamp needs very little.

✓ One idea above all

The single most important step is the simplest: make sure the label really says 'surge protector.' Everything else is fine-tuning on top of that.

First: does it actually say 'surge protector'?

This sounds almost too simple, but it's the mistake I see most often, so it comes first.

A plain **power strip** and a **surge protector** can look identical — same row of outlets, same cord. But a power strip only splits one outlet into several. It does nothing to protect against surges. A surge protector has protective parts inside that a plain strip simply doesn't have.

So read the label or the box. A real surge protector will say so plainly, and it will back that up with a joule rating, usually an indicator light, and often a warranty. If a product shows none of those, assume it's just a strip — many inexpensive ones are.

! Cheap 'strips' often aren't protectors

If the price seems too good and the package is vague, it's probably a plain power strip dressed up to look like more. When in doubt, put it back and pick one that clearly says 'surge protector.' Our protector-versus-power-strip guide shows how to tell them apart.

Understanding the joule rating

The joule rating is the number folks fixate on. Here's how to think about it without getting lost in the math.

A joule rating is a general measure of how much surge energy a protector can soak up over its whole life before it's used up — like the size of a sponge for surge energy. A bigger sponge soaks up more before it's full, and every surge uses a little. So a higher joule rating generally means more capacity and a longer useful life.

But here's the honest part: don't chase a single big number. Beyond 'enough for the job,' more joules brings diminishing returns, and a huge rating on a flimsy unit isn't worth as much as a solid one with a sensible rating. Think 'more for sensitive electronics, less for a lamp,' and let the rating guide you rather than rule you.

✓ Higher for the precious stuff

As a rule of thumb, give your television, computer, and network gear a protector with a healthy joule rating, and don't fret over the number for simple things. Our guide on joule ratings goes deeper if you're curious.

The indicator light: your peace of mind

This little light is easy to overlook in the store, but it's one of the most useful features a protector can have.

Surge protectors are **sacrificial** — their protective parts wear down a little with each surge and with age, until one day they can no longer protect. The catch that fools everyone: a used-up protector still powers your devices, so the outlets keep working and you'd never know the protection was gone.

That's what the indicator light is for. A **'protected'** light tells you the surge parts are still doing their job; if it goes out while the strip still has power, the protection is used up and it's time to replace it. A separate **'grounded'** light tells you the outlet is properly grounded — which a protector needs to work at all.

- ❑ Ideal: a unit with both a 'protected' light and a 'grounded' light.
- ❑ Place the protector where you can actually see the light without crawling behind furniture.
- ❑ Glance at it now and then, especially after big storms.

✓ No light? Replace on a schedule

Some protectors have no light — they just stop protecting silently. If yours is one of those, replace it every few years as a matter of course. Our indicator-light guide explains all the signals.

Enough outlets — and room for bulky plugs

The number of outlets matters, but so does the space between them. Here's the practical side.

Count what you actually need to plug in, then give yourself a little room to grow. But look closely at the spacing, too: those big square plugs and chargers — the ones folks call 'wall warts' — can cover two outlets at once if they're crammed together.

Well-spaced outlets, or a few widely spaced ones, let you use every socket even with bulky adapters. Some protectors angle or rotate the outlets for just this reason. It's a small thing that saves real frustration later.

✓ More outlets isn't more protection

Don't confuse the two. A protector with a dozen outlets doesn't protect any better than one with six — it just holds more plugs. Choose the outlet count for your needs, and judge protection by the other features.

Protecting the data lines too

Surges don't only travel the power cord — they ride in on your cable, phone, and internet lines as well. Some protectors guard those too.

Look for a protector with **data jacks** if you need them: connectors for coax (cable-TV or cable-internet), for a phone or DSL line, or for ethernet. You run the line in through the protector and back out to your device, and the protector guards that path the same way it guards the power.

This is well worth it for a television with a cable line, or a modem where the internet comes in, since those incoming lines are a favorite path for nearby-lightning surges. If you don't have lines like that to protect, you don't need the jacks — match the protector to your setup.

✓ Guard the whole path

A surge that can't get in the power cord will happily try the cable line instead. For a TV or a modem, protecting the data line as well as the power is the difference between half-covered and truly covered.

Warranties and the 'connected-equipment' promise

Many protectors advertise a warranty and a promise to pay for damaged devices. Let me tell you honestly what that's worth.

A **connected-equipment guarantee** is a promise to pay, up to some limit, for devices ruined by a surge that got through a properly used protector. It's a nice backstop — but it comes with conditions: proof of purchase, keeping the damaged item and the protector, proof you used it properly with a good ground, filing within a time window, and various exclusions.

So treat it as a bonus, not the reason to buy. The **protection itself** matters far more than the guarantee behind it. Read the fine print, keep your receipt, and don't let a big-sounding dollar figure sway your choice.

! Don't buy for the guarantee

A hefty connected-equipment number on the box is marketing, not a substitute for good protection. Our guide on connected-equipment warranties walks through the fine print so you know what you'd really be able to claim.

Look for the UL-listed safety mark

Amid all the features, one mark is about plain safety — and it's worth insisting on.

UL is an independent safety-testing organization. A 'UL listed' mark means the product was tested against a recognized safety standard — for surge protectors, that standard is called UL 1449. It's your assurance that the protector met real safety requirements, not just marketing claims.

You don't need to memorize the standard's number. Just look for the UL mark on the protector or its package, and be wary of anything that lacks a recognized safety listing, however cheap or fancy it looks.

! Safety listing is not optional

A surge protector handles real electrical energy, so a recognized safety listing like UL matters. If a product has no safety mark you recognize, don't risk it — pick one that does.

Two kinds of homes, two sets of needs

Where you live changes what you most need in a protector — a tidy lot in town faces a different picture than a farmhouse on a well.

If you live in town or the suburbs

In town and the suburbs, your service lines are often shorter and sometimes buried, so you see fewer big lightning surges — though plenty of grid switching and everyday spikes from your own appliances. Most of what you're protecting is comforts: the TV, the computer, the internet.

- Focus your spending on good protectors for the sensitive electronics — the entertainment center and the home office.
- A protector with data jacks pays off on the TV and the modem, where the cable line comes in.
- A basic protector is plenty for lamps and small items — no need to overspend there.
- A whole-home unit at the panel is still a fine, affordable upgrade to back up everything you plug in.

If you are out in the country on a well

Out in the country, long overhead lines invite more nearby-lightning surges, and outages come more often. That raises the stakes on protection — and means a plug-in strip alone was never going to be the whole answer.

- Give sensitive electronics protectors with a healthy joule rating — more exposure means the protection gets used up faster.
- Protecting the data lines matters even more here, since surges love long overhead cable and phone runs.
- A 240-volt well pump and other hardwired gear can't go on any plug-in strip — that's the whole-home unit's job at the panel.
- For the fussiest or most important gear, consider stepping up to a UPS instead of a plain protector.

★ Want a second opinion before you buy?

Tell me what you're protecting and I'll help you pick without overspending — I sell nothing, so it's honest advice either way. Call (330) 200-8042.

Match the protector to the job

The right protector for a computer isn't the right one for a bedside lamp. Matching it to the job saves money and gives better protection where it counts.

For **sensitive electronics** — the television and home theater, the computer, the internet and network gear — choose a better protector with a healthy joule rating, a clear indicator light, and data jacks if the device uses a cable or phone line. For the very most important gear, a UPS with built-in surge protection is often the better single choice.

For **simple things** — a lamp, a fan, a basic clock — a modest protector, or none at all, is fine. There's no need to put your best protector on a light bulb. Spend where the risk and the value are highest.

What you're protecting	What to choose
TV and home theater	Better protector, data jacks
Computer and network	Better protector or a UPS
A medical device	A UPS, plus approved backups
Lamps, fans, small items	A basic protector

✓ **Sometimes a UPS is the smarter buy**

For a desktop computer or anything you can't afford to have blink off, a UPS gives you surge protection and battery backup in one. Our UPS guide explains when it's worth the step up.

The practical bits: cord, placement, and safety

A few down-to-earth details make a protector easier to live with — and keep it working safely.

- ❑ Pick a cord long enough to reach a wall outlet directly, so you're never tempted to add an extension cord.
- ❑ Place it where you can see the indicator light without moving furniture.
- ❑ Plug it straight into a proper grounded three-prong outlet — never into another strip or an extension cord.
- ❑ Never daisy-chain (one protector plugged into another) — it's a fire risk and it undoes the protection.
- ❑ Leave a little air around it; don't bury it under a rug or a pile where heat can build up.

! Never force it into an ungrounded outlet

A surge protector needs a real ground to work. Never use a three-to-two-prong 'cheater' adapter to make one fit an old two-prong outlet — that defeats the protection. If your outlets are ungrounded, have an electrician sort it out.

A few buying myths, cleared up

The store shelf is full of half-truths. Here are the ones that lead folks astray.

- **'More outlets means more protection.'** No — outlet count is just capacity for plugs. Protection comes from the parts inside.
- **'The highest joule number is always best.'** Not quite — past 'enough for the job,' more brings diminishing returns. Build quality matters too.
- **'A power strip and a surge protector are the same.'** No — a plain strip has no protection at all. Read the label.
- **'A surge protector lasts forever.'** No — it wears out. The indicator light, or a replacement schedule, is how you keep up.
- **'The big warranty number is what to shop for.'** No — the protection itself matters more; the guarantee is a backstop with fine print.

✓ Shop the features, not the slogans

The front of the box is marketing; the real story is in the label and the features. If you check the handful of things in this guide, you'll see past the slogans every time.

Common buying mistakes to sidestep

Knowing the usual traps ahead of time makes them easy to avoid.

- **Grabbing a plain power strip** by accident because it looked like a protector — always check the label.
- **Chasing the biggest joule number** while ignoring build quality, the light, and the safety listing.
- **Skipping the data jacks** on a TV or modem, leaving the cable line as an open door for surges.
- **Buying for the warranty** instead of the protection, then discovering the fine print at claim time.
- **Hiding the protector** where you can never see its light, so you'd never know the protection had failed.

★ Bring me the box if you're unsure

Snap a photo of the label or the box and text it to me at (330) 200-8042. I'll tell you in plain words whether it's a real protector and whether it fits your gear — no charge for a quick look.

And for the whole house?

Plug-in protectors are the do-it-yourself layer. For the house as a whole, there's a bigger tool — but it's not one you buy off a shelf and install yourself.

A **whole-home surge protector** installs at your electrical panel and guards everything wired in, including the hardwired things no plug-in strip can reach: the furnace, the central air, the well pump, the range. It knocks big surges down before they spread through the house.

Because it wires into a live panel, it's strictly a licensed electrician's job, with a permit — never a do-it-yourself project, and not something I do myself. I'll help you understand it and line up a trustworthy pro. Our whole-home guide walks through the whole thing; think of it as the backbone that your plug-in protectors build on.

! Don't shop for a panel unit to install yourself

Unlike a plug-in protector, a whole-home unit is not a homeowner install. Leave the panel to the electrician — that's the one hard line in this otherwise do-it-yourself guide.

Your one-page shopping checklist

Take this to the store or keep it open while you shop online. If a protector ticks these boxes, you've chosen well.

- ☐ It clearly says 'surge protector,' not just 'power strip.'
- ☐ It shows a joule rating suited to the job — higher for sensitive electronics.
- ☐ It has an indicator light, ideally both 'protected' and 'grounded.'
- ☐ It has enough well-spaced outlets for your bulky plugs.
- ☐ It has data jacks if you need to guard a cable, phone, or ethernet line.
- ☐ It carries a warranty and a UL-listed safety mark — and you've glanced at the fine print.

✓ Print it and tuck it in your wallet

You don't have to memorize any of this. Keep the checklist handy, run down it when you shop, and you'll never be talked into the wrong thing.

How I can help

Choosing and setting up plug-in protection is exactly the kind of everyday task I love to take off your plate.

I can look at what you own, tell you honestly which protectors are worth buying and where a plain one will do, and set them all up neatly — cords managed, lights where you can see them, data lines protected. Since I sell no products and earn no commission, the advice is yours, not a sales pitch.

For the whole-home protector at the panel, I don't do the electrical work myself — that's a licensed electrician's job — but I'll help you understand it, decide if it's right, and line up a trustworthy local pro.

★ Real help, close to home

A first in-home visit is a flat \$99, and for the simple things I can often help over the phone or a screen-share for \$49. Every visit comes with a 30-day, come-back-free guarantee. Call or text (330) 200-8042.

Knowing when to replace one

Buying well is half the job; knowing when a protector is spent is the other half. Here's when to swap one out.

- After a known big surge or a nearby lightning strike — a single large hit can use one up.
- When the 'protected' light goes out or changes, even though the outlets still work.
- If it's visibly damaged, discolored, hot to the touch, or smells burnt — stop using it at once.
- As a matter of course every few years, following the maker's guidance, especially if it has no light.

Here's the reassuring part: protectors are the cheap part of the whole equation. When in doubt, replace it. A new protector costs a fraction of the electronics it guards, so there's no sense nursing a doubtful one along.

! Burnt smell or heat means stop now

If a protector is hot, discolored, or smells burnt, unplug it if you can do so safely and stop using it. That's not a wait-and-see moment — replace it, and if anything nearby is scorched, call an electrician.

The five-second label test

When you're holding a protector in the aisle, here's a quick pass that tells you most of what you need.

Flip it over and read the label. Does it say **surge protector**? Is there a **joule rating** and a mark for an **indicator light**? Do you see a **UL** safety mark? Are there **data jacks** if you need them? Five quick looks, and you already know whether it's a contender.

If it passes those, then weigh the finer points — outlet spacing, cord length, the warranty's fine print — and match the joule rating to how sensitive your gear is. That's the whole decision, start to finish.

✓ The label tells the truth

Marketing lives on the front of the box; the facts live on the label and the spec sheet. Trust the label, and you'll rarely go wrong.

Where to begin, without overthinking it

You don't have to protect everything at once. Here's a calm order for most homes.

First, put good protectors on the sensitive electronics you already own — the TV and home theater, the computer, and the internet gear, with data jacks where the cable or phone line comes in. That's the biggest payoff and the easiest to do yourself this week.

Then, add basic protectors elsewhere as needed, consider a UPS for anything you can't afford to have blink off, and when you're ready, ask a licensed electrician about a whole-home protector at the panel. Even one good protector is far better than none.

★ A plan that fits your budget

Tell me your home and what you'd hate to lose, and I'll help you put it in a sensible order, starting with the cheap, easy wins. No pressure, ever. Call or text (330) 200-8042.

Common Questions

The questions I hear most when folks are choosing a protector, answered plainly.

Q: How can I tell a surge protector from a plain power strip?

Read the label. A real surge protector says so, and backs it up with a joule rating, usually an indicator light, and often a warranty. A plain strip has none of those — it only adds outlets. If it doesn't say 'surge protector,' assume it isn't one.

Q: How many joules do I need?

I can't give you a single number, and you should be wary of anyone who does. In general, higher means more capacity and longer life — so give sensitive electronics a healthy rating and don't fuss over it for a lamp. Our joule-rating guide goes deeper.

Q: What's the indicator light for?

It tells you the protection is still working. A protector wears out over time, but the outlets keep powering your devices even after it can no longer protect. If the 'protected' light goes out while the strip has power, replace it.

Q: Is the connected-equipment warranty worth it?

Treat it as a nice backstop, not the reason to buy. These guarantees come with conditions and fine print, and payouts can be limited. The protection itself matters more. Our warranty guide explains what you'd really be able to claim.

Q: Should I get a surge protector or a UPS?

For most gear, a good surge protector is plenty. For a desktop computer, your network, or anything you can't afford to have blink off, a UPS gives you surge protection and battery backup in one. Our UPS guide helps you decide.

★ Still have a question?

That's what I'm here for. Call or text me at (330) 200-8042 and ask away — there's no such thing as a silly question here.

You don't have to do this alone

You just have to remember that a friendly, patient person is one call away.

I hope this guide made choosing a surge protector feel a little less daunting and a lot more doable. Keep it in a drawer with your other home papers, come back to a page whenever you need it, and don't worry about memorizing anything.

When you'd rather have a hand, that's exactly what I do. I come to your home, work at your pace, and never make you feel rushed or silly for asking. A first visit is a flat \$99, and for the parts that don't need me on-site I can often help right on your screen for \$49. Every visit comes with a 30-day, come-back-free guarantee. I don't do the licensed electrical work myself — for that I'll help you line up a trustworthy local pro.

★ Bill's Home Tech — real help, close to home

Call or text me at (330) 200-8042, or visit BillsHomeTech.com. Serving Atwater and all of Portage County. 30+ years of patient, plain-English tech help — and if you're ever not 100% happy with a visit, I'll make it right or refund it. That's a promise. — Bill

What to Look For

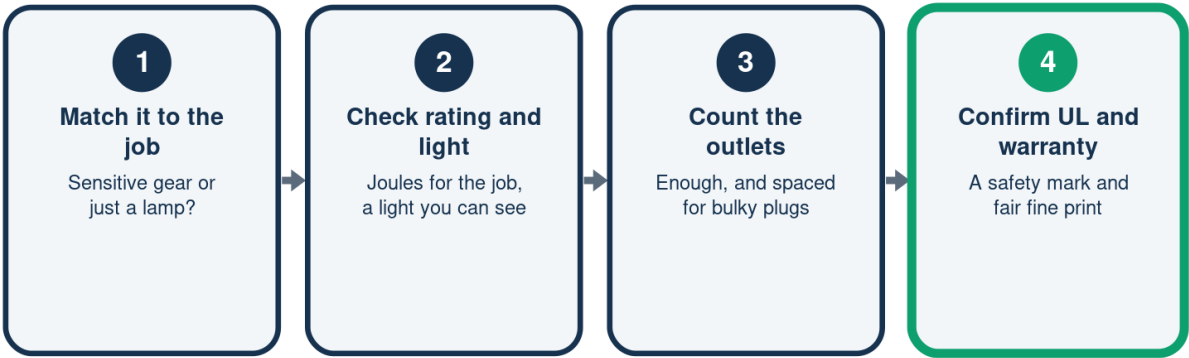
The features that make a real protector

Why it matters	
Says surge protector	Real protection
Joule rating	Capacity and life
Indicator light	Know it works
Data jacks	Guards cable/net
UL listed	Safety-tested

If it shows none of these, assume it's just a power strip.

Choosing in Four Steps

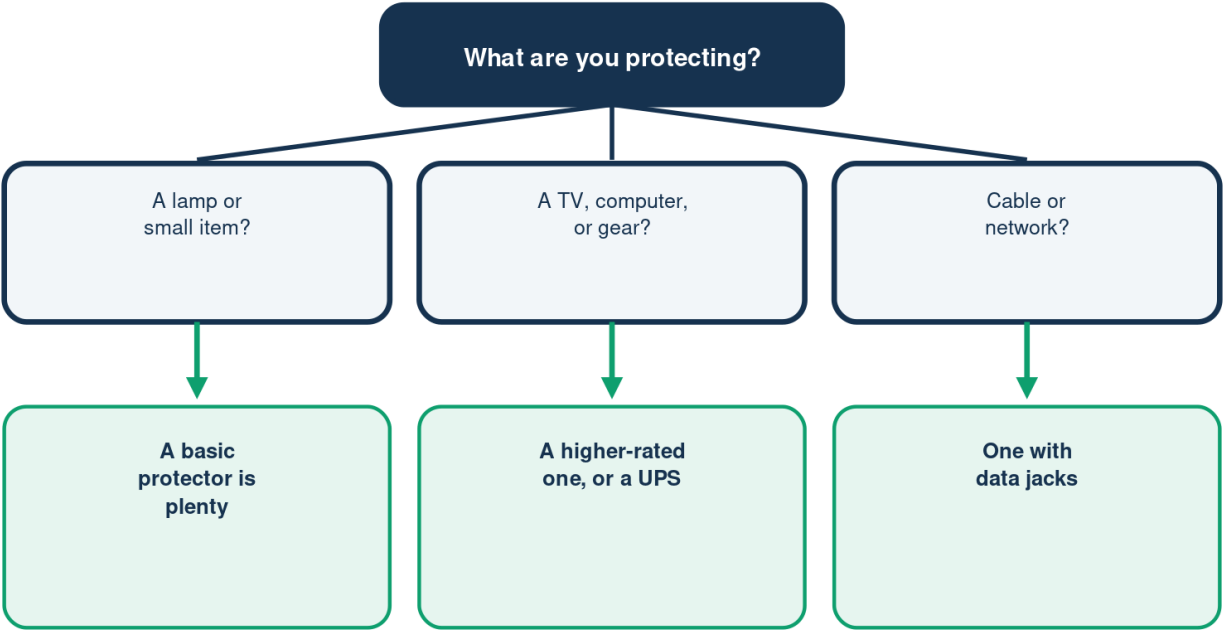
A simple path to the right protector



Four quick checks, and you've chosen a protector with confidence.

What Are You Protecting?

Let the gear point you to the right pick



For the whole house, ask a licensed electrician about a panel unit.

Illustration - a schematic, not to scale. Your setup may differ.

Surge Protector or a UPS?

When to step up from one to the other

	Surge protector	UPS
Stops spikes	Yes	Yes
Rides out outage	No	Yes
Best for	Most gear	Critical gear
Cost	Lower	Higher

Most gear wants a good protector; critical gear wants a UPS.



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Prefer help without a visit?

Bill can screen-share and fix many things remotely — a flat \$49, free for Support Plan members.



A Note From Bill

A quick note from Bill.

I write these guides to make home tech a little less frustrating, and I do my best to keep every step accurate and up to date. Still, every home, device, and setup is a bit different, so I can't promise a guide will match yours exactly or fix your particular problem. These guides are for general information only — they're not professional, legal, or financial advice, and they don't replace your device's own manual or the manufacturer's instructions. Please go slow, use your own good judgment, and use everything here at your own risk. If a step involves electrical wiring, a gas appliance, a water heater, plumbing, or climbing a ladder — or if anything just doesn't feel safe — please stop and call a licensed professional (or give me a call at 330-200-8042). Bill's Home Tech and Bill Davis can't be responsible for any damage, data loss, or injury that comes from using these guides. Thanks for reading, and stay safe out there.

— *Bill*



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