

# Differences between normal and power surge protection

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## Not all electric drives often have voltage surge protectors

A power outlet is usually plugged into a wall outlet and provides outputs for multiple devices. In essence it is an extension cord with multiple sockets and does not have special features, although it may have an adapter to quickly disconnect all connected devices. Connecting the device to an electrical outlet is often like plugging it into a wall outlet.

A surge-resistant electric outlet is usually shaped like a normal electric outlet. Like regular electric drives, most surge-resistant electric drives are plugged into a wall outlet and provide sockets for many devices. However, an anti-surge electric drive also has a built-in electronics, which helps to prevent surge currents that can damage the device. The device is better protected when plugged into a power outlet against voltage rise compared to a wall outlet.

Although normal power outlets and voltage-boosted electric drives look the same, not all power outlets are usually voltage-resistant power drives. Voltage-resistant electric drive is more expensive than conventional electric drive. For example, you might have to pay \$ 20 for a surge-proof electric drive, while a power outlet usually has a similar design for only \$ 10.

Users should use expensive electronic devices such as TVs, sound systems or computers and fancy electronic devices other than electric surge protectors. However, with other devices such as coffee makers or toasters, regular power outlets can be used.

Although the surge-proof electric drive usually has the shape of a normal electric drive, but not the voltage surge-proof drive is the same. For example, there is an anti-surge voltage socket a socket can only plug one device only but with surge protectors. Power drive designs are more common for anti-surge devices.

## How to recognize the difference by packaging

When buying an anti-voltage electric outlet at the store, look for the words 'surge protector' or at least "protection" or "suppression". You often see normal power outlets and surge-resistant electric drives placed close to each other on the store shelves and if you don't notice it looks very similar. Power drives will usually be cheaper and it has a 'power strip'.

The surge-proof electric drive is measured by the amount of energy measured in joules that it can absorb, so you can see that this information is clearly recorded on the voltage surge device. For example, Belkin's surge-resistant electric drive has an energy level of 3,940 Jun. When looking at the norm, the electric drive against voltage rise with the norm of 1000-2000 Jun is usually a good power outlet for small electronic devices such as network equipment, smart phones, printers, etc. If using the audio equipment, game console or desktop, laptop, use 2000 Jun power socket. And if there are multiple devices, you can use a power outlet with a higher rating.

## How to know the difference on the device



If you have a regular series of electrical outlets and are unsure of whether they have a surge-resistant power outlet, perform a quick check in the following way. Conventional surge protectors (but not always) have "Protected" or "Protection" lamps on them and they will light up when the power socket is plugged into a wall outlet.

If you flip the back of the device, you can see the parameter 'suppressed voltage rating' or similar specifications. And if you see anything that refers to "protection" or "suppression" on it, that device is an anti-voltage surge socket.

Lights on surge-proof devices are designed with the purpose of letting users know when the socket is old, no longer with anti-voltage function and need to be replaced. If you see the light is no longer lit when plugged into the socket, it means that the socket is old and it only functions as a normal socket.

If you do not see the "protected" light or any text that says 'protection' or 'suppression' on the device, then this is a normal socket. It can be used with devices such as coffee makers but is not good when used for audio systems.

And if you're looking for better protection for desktop or laptop computers, you might consider an uninterruptible power supply (UPS). This device also provides protection against surge voltage and can plug in

many devices, not only that it also protects against sudden power failure with battery backup so users can save documents and turn off the computer in a way normal.

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