

What is a Surge Protection Device?

A surge protection device, or SPD as it is commonly referred to, is a small component that will be installed in your consumer unit (or fuse box), along side the other components such as MCB's and RCD's. It will protect your home from any surges in the power supply.

What is a Surge?

A surge is a very short sharp increase in the voltage of the electrical system. The voltage is the pressure of the electrical system, so when this increases, it can lead to damage to electrical components. You may not be aware of the surges when they occur, but over time they lead to the degradation of electrical components, which will shorten the lifespan of the equipment in your home.

What a does Surge Protection Device do?

A surge protection device will stop any excess voltage from being able to damage your electrical equipment, by diverting the voltage to earth. This will not disrupt your supply, like an MCB tripping would, instead the SPD will send any excess voltage to earth and then reset itself for the next surge.

What about lightning?

Lightning can also cause surges in electrical systems. When lightning strikes the ground, it can cause surges inside homes more than 2 miles away. So yes, an SPD would give some level of protection against lightning, but most surges are caused by electrical grid disturbances and power cuts.

If your home is fed by an overhead supply however, you will need additional protection against a direct strike to the network, in the form of a higher capacity SPD, which is referred to as a Type 1 Surge Protection Device.

Why does your home need a Surge Protection Device?

Since the introduction of the current edition of the BS 7671 wiring regulations, the installation of surge protection devices has been made a requirement in most buildings. Due to technological advances, and a large focus on energy efficiency, more equipment within your home contains very sensitive electronic components which can be easily damaged due to surges. Examples of equipment containing these sensitive components are smart TV's, phones, tablets and even household appliances such as washing machines, boiler control panels and LED lighting. This is even more important if your home is supplied via an overhead power cable.

When deciding if you would like an SPD installed, please consider the value of all of your electrical equipment. It is also worth considering if there is any irreplaceable data that could be lost, such a important documents and photos, quite often if a computer is damaged, unless the data has been backed up, it will all be lost. Your home insurance provider may also ask if you have an SPD installed.

If you would like any more information on the use of surge protection, please feel free to contact us.