

**CLIPSAL**<sup>®</sup>  
*every room, every home*

# Surge Protection

Product Guide



*A complete guide to safeguarding  
your valuable equipment  
from electrical surges*

## **What's at risk from overvoltage?**

Every year millions of dollars worth of expensive equipment is destroyed by power surges caused by lightning strikes. But lightning doesn't have to strike directly on a building or home to cause damage. Overvoltage surges are caused by indirect lightning strikes too.

Likewise, spikes in electricity caused by supply authorities switching operations can result in expensive damage to electrical equipment. Basically anything electrical is at risk, including:

- Computers
- Modems
- Fax machines
- Ovens
- Microwaves
- Dishwashers
- Refrigerators
- Other kitchen equipment
- Answering machines
- Televisions
- Stereo systems
- Videos and DVD players
- Home security
- Computer games
- Roller doors
- Electrical cables and light fittings

## **Will an insurance policy cover the damage?**

Most insurance companies need evidence that a lightning strike has caused the damage. Unless hard physical evidence can be provided, it is very difficult to make a successful claim. To make it even more difficult, electronic damage may not be at all obvious and can sometimes be caused by several unnoticeable surges that gradually cause equipment failure.

## **How do surge protectors work?**

Surge protectors work by diverting extra voltage and energy surges to the ground instead of letting them enter the home and into expensive equipment. Some surge protectors operate within the home at the power point.

## **How much protection is enough?**

The amount of protection you need depends on the sensitivity of your equipment, how important it is to keep the equipment operating, and its financial value. There are several lines of defence that you can use depending on how important the equipment is to you.

## First Line Protection

The first line of defence is to have an electrician install a Clipsal 970 Surge Arrestor to your switchboard. This diverts the power surge from entering your house at the electrical point of entry. 970 overvoltage protectors offer fair protection for general household equipment however will not give protection from a direct lightning strike.



**970RM**

## Direct Lightning Protection

Clipsal's additional equipment - the 950/4 and 970LCA - provides extra protection from the increased energy expected from a direct lightning strike. A 970LCA must be used in conjunction with a 970 Surge Arrestor and Decoupling device. If you wish to have this additional protection, your electrician can easily install it for you.



**950/4**



**970LCA**

## Second Line Protection

As a second line of defence it is worth installing a Clipsal Line Conditioner 970MF in your house's switchboard. To be used in conjunction with a 970, this device provides the additional protection needed for sensitive electrical equipment such as personal computers.



**970MF**

## MORE INFORMATION

For complete peace of mind, discuss a suitable power surge defence system with a licensed electrician.

## In House Protection

Power point protection offers defence within the house too. But whilst this is a more economical solution, it is not ideal because the energy is now inside. In-house protection is best used to complement other lines of defence designed to stop surges at the switchboard.



**25SF**



**C2025SF**

Power point protection is installed by simply replacing existing power points. Surge protected power outlets look just like regular outlets except they have a small indicator to tell you when protection is available.



**2025SF**

Simple plug-in power point protection is available too. Clipsal Surge Filters are adaptors that simply plug into existing power points.



**463SF**

## Surge Protection Product Range

<b>Cat. No.</b>	<b>Description</b>
<b>950/4</b>	High capacity 4 pole overvoltage arrester, DIN mounted
<b>970</b>	Overvoltage arrester, 275V, 20kA
<b>970P</b>	Replacement protection plug, 275V, 20kA
<b>970RM</b>	Overvoltage arrester with removable module, 275V, 20kA
<b>970T</b>	Overvoltage arrester with auxiliary contacts, 275V, 20kA
<b>970RMT</b>	Overvoltage arrester with removable module and aux./cont., 275V, 20kA
<b>970MF10</b>	Mains filter 250V 10A 50/60Hz 2 modules wide
<b>970MF20</b>	Mains filter 250V 20A 50/60Hz 4 modules wide
<b>970DE</b>	Decoupling element, 500V, 35A
<b>970DE63</b>	Decoupling element, 500V, 63A
<b>970LCA</b>	Lightning current arrester, 264V, 25kA
<b>970/3LCA</b>	Lightning current arrester, 264V, 25/75kA - 3 pole
<b>25SF</b>	Power outlet, double, 250V, 10A
<b>463SF</b>	Surge filter plug adaptor, 250V, 10A
<b>C2025SF</b>	Power outlet, double, surge protected
<b>2025SF</b>	Power outlet, double 250V, 10A with surge protection
<b>951</b>	Disconnection spark gap
<b>952</b>	Disconnection spark gap type Ex



**Gerard Industries Pty Ltd**

ABN 27 007 873 529

**Head Office**

12 Park Terrace, Bowden

South Australia 5007

Telephone (08) 8269 0511

Facsimile (08) 8340 1724

Internet [www.clipsal.com](http://www.clipsal.com)

E-Mail [plugin@clipsal.com.au](mailto:plugin@clipsal.com.au)

Offices in all States

**NSW** Sydney (02) 9794 9200

Albury (02) 6041 2377

**VIC** Melbourne (03) 9207 3200

Country Areas 1800 653 893

**QLD** Brisbane (07) 3244 7444

Townsville (07) 4729 3333

**SA** Adelaide (08) 8268 0400

**WA** Perth (08) 9442 4444

**TAS** Launceston (03) 6343 5900

**NT** Darwin (08) 8947 0278

© Copyright Gerard Industries Pty Ltd

**[clipsal.com](http://clipsal.com)**

Printed by Custom Press Pty Ltd (08) 8346 7999

O/N 0220 August 03/02