Voltage Protection
Sollatek power protection solutions

Protect your valuable equipment

Complete range of **voltage switchers, suppressors, stabilisers, regulators, inverters** and **uninterruptible power supplies (UPS)**
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Solar power products and systems 30-31
Beware! Copies and counterfeits could damage your appliances and potentially cause electrical fires, putting yourself, your family and your home at risk.

Only authorised Sollatek retailers sell the genuine and patented Sollatek product.

Stay original and do not compromise on your safety.
Sollatek's **expertise** extends worldwide through local networks

**Global and Local**

Established for over thirty years in the United Kingdom, Sollatek is a manufacturer of innovative products in power control, energy saving, temperature control, and solar energy. With its head office in the UK, Sollatek has a network of partners across the globe. The Sollatek network comprises of local Sollatek companies (with service centres) in over ten countries and distributors and resellers in over fifty countries.

We work closely with our partners around the world to deliver our promise of a two year worldwide warranty, and in some countries this is further extended to a five year warranty.

With keen interest in emerging markets where the power quality is unreliable, Sollatek works closely with clients in a variety of disciplines including NGOs, charities, embassies, telecom providers, manufacturers of refrigeration appliances, medical equipment and various other OEMs.
With customers across the world and a local presence in more than 50 countries, Sollatek is able to provide support services wherever you are.

Angola  Botswana  Cameroon  Channel Islands  Cyprus  Egypt  Ethiopia  Ghana  Greece  Hong Kong  India  Iraq  Kazakhstan  Kenya  Liberia  Libya  Malawi  Mozambique  Namibia  Nepal  Netherlands  Nigeria  Pakistan  Saudi Arabia  South Africa  Spain  Sri Lanka  Tanzania  Uganda  United Kingdom (HQ)  USA  Zambia  Zimbabwe
What's new

**NotebookGuard**
The NotebookGuard is a universal in-line plug-in adaptor suitable for all laptops. It prevents damage to your laptop from high voltage levels of any duration. It works by disconnecting the power when voltage goes too high. It will reconnect the mains to your laptop when power returns to normal. Up to 3 Amps.

**Fridge-Stab**
The TV-Stab provides you with voltage stabilisation and protection for your domestic fridge/freezer against high and low voltage. A built in startup delay will protect against power back surges.

**A/C-Stab**
The A/C-Stab provides you with voltage stabilisation and protection for your air conditioner. The A/C-Stab will ensure that low and high voltage is brought to a safe working level for your A/C to operate properly and to cool efficiently. A built in startup delay will protect against power back surges.

**PowerBack**
The Sollatek PowerBack is an emergency backup system that makes it possible for homes or offices to have continued access to electrical service during power outages. The Sollatek PowerBack is a transformerless battery-based system that will provide simple and silent operation. Up to 5000VA / 4200W.

**ULTIMA LCD UPS**
Uninterruptible power supply
The Sollatek Ultima LCD - available in 650, 850, 1000, 1500 and 2000VA ratings - is the perfect line interactive UPS for stand alone PCs and SoHo workstations. It protects your network equipment from power surges, brownouts and utility failures at a competitive cost. Its compact design features tighter output voltage and frequency regulation, RS232 and USB communications port, and modem/data line protection. Up to 2000VA / 1200W.

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Power problems and their associated causes

All electrical and electronic equipment, connected to the mains supply is at risk of being damaged from spikes, surges, lightning, brown-outs, power-cuts (blackouts), power back surges, and over-voltage. The following is a summary of the main types of power problems, their causes, and how these affect electrical and electronic equipment.

**High/Over-Voltage:** Long duration (milliseconds, seconds, minutes, hours or days) rise in the voltage above acceptable limits. Depending on the level of the over-voltage, the damage can be instantaneous, severe and irreparable.

**What causes it?** On return of mains supply after power cuts, under-sized utility oscillating between periods of brown-outs and over-voltage or accidental (e.g. accidental connection between two phases).

**Brown-Out / Under-Voltage:** Long duration of low voltage (milliseconds to seconds, minutes, hours or days). Very common in parts of the world especially where the power utilities are over-stretched. Prolonged and frequent brown-outs cause the equipment to malfunction or not work at all. Repeated episodes are certain to cause damage. Motors and compressors (and therefore fridges, freezers, coolers, air-conditioners and pumps) are especially at risk. In time, damage is certain.

**What causes it?** Most commonly an over-stretched utility, especially in areas of poor power distribution infrastructure and remote areas. Common in dry seasons where water is used for electricity generation.

**Spikes/Surges:** Very short, (one millisecond) events of very high surge in voltage to thousands of volts and amps. Spikes are common in all parts of the world and repeated exposure to spikes will damage electronic equipment and corrupt data.

**What causes it?** Switching on/off of nearby equipment, lightning, motors starting etc.

**RFI (Radio Frequency Interference) / Noise:** High frequency disturbances that occur within a short period of time (milliseconds). RFI & noise are very common in all parts of the world and are the main cause of data corruption.

**What causes it?** Generated by high frequency noise from nearby equipment like TV, radio equipment, transmitters, mobile phones, switching on/off of certain loads, fluorescent lights, motor speed controls, light dimmers.

**Lightning:** Direct or nearby strikes can cause minor problems or severe disturbances and damage. Lightning produces spikes/surges, over-voltage or power cuts.

**What causes it?** The surge is generated by either a direct hit, or indirectly striking underground or overhead lines and transmitting high surges to connected equipment in nearby buildings. For more information, see page 16.

**Power Cuts:** Common in every country in the world, especially in areas of frequent voltage problems. Sudden loss of power can cause damage ranging from corruption of data to mechanical faults as equipment is stopped while in operation.

**What causes it?** Power or substation failure, breakdown in the distribution network, or simply a plug being pulled out accidentally.

**Power-Back Surges:** These typically occur when power returns after a power-cut and connected equipment receives a surge of electricity at an over-voltage level, which can be very damaging (see above).

**What causes it?** Power back surges are created by the utility, when it restores supply at an above normal voltage in order to compensate for the demand as connected equipment re-starts simultaneously.

**Telecom Surges, Spikes and Lightning:** Short term, high voltage and current phenomena occurring on the telephone lines. Can cause irreparable damage to any piece of equipment connected to the incoming line. The telephone line itself may even be damaged or destroyed in severe cases.

**What causes it?** Telecom spikes are caused by lightning striking either the telephone line directly or an object near it.

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The Sollatek voltage protection range consists of four categories:

**Voltshield™**

*The Switcher Range*
Disconnects power when voltage level exceeds set parameters. Automatically reconnects again when power returns inside parameters for a pre-set period.

**Voltsafe™**

*The Suppressor Range*
Stops short-term disturbances (created by lightning strikes, power stations or nearby equipment switching on & off), from causing damage.

**Voltright™**

*The Stabiliser and Regulator Range*
Ensures equipment can still operate although the voltage level is outside its 'normal' range, by automatic correction within set levels.

**Voltsure™**

*The UPS Range*
Keeps equipment operating temporarily in a blackout by using standby battery power.

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For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Overview

Voltsafe™ Suppressors

MultiGuard MGX
Mains spike/surge protection
Up to 13 Amps
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MultiGuard MG
Mains spike/surge protection
Up to 13 Amps
PAGE 17

SpikeGuard
Mains spike/surge protection
Up to 6 Amps
PAGE 17

PureAC
Mains spike/surge and RFI protection
Up to 13 Amps
PAGE 17

CommsGuard
Mains and data/telecom spike/surge protection
Up to 13 Amps
PAGE 18

DSP Single & three phase
DSP1P-20-T2, DSP3P-80-T2
Mains spike/surge and lightning protection
PAGE 18-19

DSP Single & three phase
DSP1P-100-T2, DSP3P-100-T2
Mains spike/surge and lightning protection
PAGE 19

DSP Three phase
DSP3P-170-T1
Mains spike/surge and lightning protection
PAGE 19

Sollatek Voltage Stabiliser (SVS)
Mains over & under voltage stabilisation protection
Up to 75 Amps
PAGE 22

SpikeGuard
Mains over & under voltage stabilisation protection
Up to 16 Amps
PAGE 21

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AVS™ function

The AUTOMATIC VOLTAGE SWITCHER (AVS™) function adds the following protective function: For complete protection, simply plug the Automatic Voltage Switchers (AVS) into the mains and plug in your appliances. When the mains power supply fluctuates outside pre-set tolerances (nominally 190V and 260V) the power to your equipment is disconnected.

The AVS monitors the voltage for a short period to ensure the power has stabilised before re-connecting. In addition, the start-up delay provides protection against power-back surges commonly experienced after resumption of power in a power cut situation.

Surge and spike protection is also incorporated to ensure protection against these events which are very common. They are generated by lightning and nearby switching off and on of other equipment such as vacuum cleaners, pumps, motors, television, elevators etc.

TIMESAVE™ function

TIMESAVE™ adds the following protective function:

Some Sollatek units have a built-in microprocessor which adds the advanced feature TimeSave.™ TimeSave™ means that when the mains return to normal, the unit checks the duration of the OFF time. If the unit has been off for more than the standard wait time, then it will reconnect the mains within 10 seconds. This ensures the Sollatek unit will give you more vital working time than any other stabiliser. The duration of the start-up delay period varies between 10 seconds and 10 minutes, depending on the model. For refrigeration and air-conditioning equipment, a delay of 3-4 minutes is recommended. The 3-4 minute delay allows compressors to neutralise before re-starting.

iSense™ function

The iSense™ technology allows you to control how sensitive the VOLTSHEILD Switcher reacts to voltage problems. Using the iSense™ dial you can set the desired level of protection.

(H) High setting ensures greater protection by narrowing the acceptable voltage limits. This is ideal for users with less erratic mains supply that require better protection, typically in main cities where the power supply is fairly stable.

(L) Low setting ensures more working time as it will tolerate wider acceptable voltage limits. This is ideal for users with more erratic mains supply. This setting provides a wider window of acceptable voltage limits.

Socket availability

UK 13amp
UK 15amp
European (Euro)
Indian R6

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Single phase up to 7 amps

**NotebookGuard**

Over voltage protection

**Protection against:**
- High voltage
- Spikes/surges
- Power-back surges

**Plug/socket availability**
- Cloverleaf
- Figure of 8

**Features**
- 2 AMPS
- 40 SECONDS START UP DELAY
- MICROPROCESSOR PROTECTION
- AVS™ FUNCTION
- LAPTOP SAVED

**Features**
- Protection for
- TV, Video, Hi-fi, PABX, Fax machines and all electronic equipment up to 6 amps

**Model**
- NotebookGuard Cloverleaf
- NotebookGuard Figure of 8

**Product code**
- 9266C000
- 92668000

**Max current**
- Figure 8: 1A, Cloverleaf: 2A

**Voltage range**
- 85 to 300V AC

**Frequency**
- 50/60Hz

**Wait time**
- 10 seconds

**Ideal for**
- Notebooks, laptops and netbooks

**Tip**
- Disconnects the mains when it is bad, allowing the notebook’s battery to take over, effectively operating as a UPS. Can be used with any equipment and not only notebooks as long as you don’t exceed 3Amps

**Weight**
- Cloverleaf: 113gm. Figure 8: 100gm

**Dims**
- 116 x 32 x 29 mm

**Cable length**
- 116 mm

**HivoltGuard**

Over voltage protection

**Protection against:**
- High voltage
- Spikes/surges
- Power-back surges

**Plug/socket availability**
- Cloverleaf
- Figure of 8

**Features**
- 6 AMPS
- 40 SECONDS START UP DELAY
- MICROPROCESSOR PROTECTION
- AVS™ FUNCTION
- LAPTOP SAVED

**Features**
- Protection for
- TV, Video, Hi-fi, PABX, Fax machines and all electronic equipment up to 6 amps

**Model**
- Hivoltguard – UK socket
- Hivoltguard – European socket
- Hivoltguard – Indian socket

**Product Code**
- 92615000
- 92615100
- 92615300

**Max current**
- 6 amps

**Wait time**
- 30 seconds

**Ideal for**
- TV, Video, Hi-fi, PABX, Fax machines and all electronic equipment up to 6 amps

**Tip**
- Protects all sensitive equipment against high voltage, surges and spikes. A very useful protection for uninterruptible power supplies and inverters.

**Weight**
- 186 gm

**Dims**
- 140 x 60 x 90 mm

**Cable length**
- 116 mm

**TVGuard**

Over voltage protection

**Protection against:**
- High voltage
- Spikes/surges
- Power-back surges

**Plug/socket availability**
- Cloverleaf
- Figure of 8

**Features**
- 6 AMPS
- 40 SECONDS START UP DELAY
- MICROPROCESSOR PROTECTION
- AVS™ FUNCTION
- LAPTOP SAVED

**Features**
- Protection for
- TV, Video, Hi-fi, PABX, Fax machines and all electronic equipment up to 6 amps

**Model**
- TVGuard – UK socket
- TVGuard – European socket
- TVGuard – Indian socket

**Product Code**
- 92600000
- 92610100
- 92605300

**Max current**
- 6 amps

**Wait time**
- 30 seconds

**Ideal for**
- TV, Video, Hi-fi, PABX, Fax machines and all electronic equipment up to 6 amps

**Tip**
- To avoid frequent disconnection in areas of extreme fluctuation, add a stabiliser (see page 20) before the TVGuard

**Weight**
- 186 gm

**Dims**
- 140 x 60 x 90 mm

**Cable length**
- 116 mm

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
FridgeGuard
Under voltage protection

**Protection against:**
- Low voltage
- Spikes/surges
- Power-back surges

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<tr>
<td>FridgeGuard – European socket</td>
<td>92605100</td>
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<tr>
<td>FridgeGuard – Indian socket</td>
<td>92605300</td>
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</table>

**Max current:** 6 amps
**Wait time:** 3 minutes
**Ideal for:** Fridges and domestic freezers
**Tip:** Low voltage is particularly damaging to the compressor of fridges and freezers. 3 minutes wait for re-connection to allow for decompression of the compressor.

**Weight:** 186 gm
**Dims:** 140 x 60 x 90 mm

**Features:**
- 6 AMPS
- 3 MINUTES
- TIME-SAVE
- iSense
- AVS FUNCTION

VoltGuard
Over and under voltage protection

**Protection against:**
- High voltage
- Low voltage
- Spikes/surges
- Power-back surges

<table>
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<td>92625100</td>
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<tr>
<td>Voltguard – Indian socket</td>
<td>92625300</td>
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**Max current:** 7 amps
**Wait time:** User adjustable 3 minutes or 30 seconds
**Ideal for:** TV, Video, Hi-fi, PABX, Fax machines, Fridges and domestic freezers and all electronic equipment up to 7 amps
**Tip:** Covers all applications as it has over and under voltage protection.

**Weight:** 190 gm
**Dims:** 140 x 60 x 90 mm

**Features:**
- 7 AMPS
- 30 SECONDS
- TIME-SAVE
- iSense
- AVS FUNCTION
- ALL EQUIPMENT
- AVS FUNCTION

LightningGuard
Over voltage protection and data/telecom line protection

**Protection against:**
- High voltage
- Spikes/surges
- Power-back surges
- Data line spike surges/lightning (i.e. for telephonemodem/fax lines)

<table>
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<td>LightningGuard – European socket</td>
<td>92605100</td>
</tr>
<tr>
<td>LightningGuard – Indian socket</td>
<td>92605300</td>
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</table>

**Max current:** 6 amps
**Mains surge/spike protection:** 180 Joules
**Mains surge/spike discharge:** 6.5kA (8/20μs)
**Wait time:** 30 secs
**Data surge/spike discharge:** >5kA
**Ideal for:** Modem, fax, telephones, routers
**Tip:** Ideal for protection of computer data, internet, modems, fax machines and telephones. Lightning and mains surges and spikes can enter the telephones and cause damage to hardware and data. Being connected to the internet for long periods increases the risk of damage. The LightningGuard provides an effective way of preventing serious damage.
**Socket availability:** Mains + telephone connection (RJ11)

**Weight:** 195 gm
**Dims:** 140 x 60 x 90 mm

**Features:**
- 6 AMPS
- 45 SECONDS
- TIME-SAVE
- iSense
- AVS FUNCTION

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
### AVS13 Appliance Guard
**Automatic Voltage Switcher**
**Over and under voltage protection**

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<th>Model</th>
<th>Product Code</th>
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<tr>
<td>AVS13 – UK socket</td>
<td>91130000</td>
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</table>

- **Max current**: 13 amps
- **Wait time**: User adjustable from 10 seconds to 3 minutes
- **Ideal for**: All electrical and electronic equipment
- **Tip**: Can protect a number of appliances using a multi-way socket.
- **Weight**: 500 gm
- **Dims**: 145 x 100 x 55 mm

**Protection for**
- A/C
- FREEZERS
- COOLERS
- ALL EQUIPMENT

### AVS13RL Appliance Guard
**Automatic Voltage Switcher + RFI & lightning protection**
**Over and under voltage protection**

<table>
<thead>
<tr>
<th>Model</th>
<th>Product Code</th>
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<tr>
<td>AVS13RL – UK socket</td>
<td>91130413</td>
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</table>

- **Max current**: 13 amps
- **Wait time**: User adjustable from 10 seconds to 3 minutes
- **Attenuation (db)**: 20@100Khz, 50@1Mhz
- **Ideal for**: All electrical and electronic equipment
- **Tip**: AVS13RL adds RFI & noise and lightning protection to the standard AVS13. Use this product if you are in an area where lightning is a serious issue, or you need to filter the power supply from RFI & noise.
- **Weight**: 500 gm
- **Dims**: 145 x 100 x 55 mm

**Protection against**:
- High voltage
- Low voltage
- Spikes/surges
- RFI (radio frequency interference) and noise
- Lightning

### AVS15 Aircon Guard
**(Automatic Voltage Switcher)**
**Over and under voltage protection**

<table>
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<th>Model</th>
<th>Product Code</th>
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<tr>
<td>AVS15 – 3 round pin</td>
<td>91150000</td>
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</table>

- **Max current**: 15 amps
- **Wait time**: User adjustable from 2 minutes to 5 minutes
- **Ideal for**: Air conditioners, large fridge/freezers
- **Tip**: Rated at 15 amps for use with air-conditioners up to 17,500 B.T.U
- **Weight**: 500 gm
- **Dims**: 145 x 100 x 55 mm

**Protection for**
- A/C
- FREEZERS
- COOLERS
- ALL EQUIPMENT

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
### A/C Guard (Automatic Voltage Switcher)
#### Over and under voltage protection

<table>
<thead>
<tr>
<th>Model</th>
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<tbody>
<tr>
<td>A/C Guard 16A 115V</td>
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<td>A/C Guard 16A 220V</td>
<td>92621620</td>
</tr>
<tr>
<td>A/C Guard 20A 115V</td>
<td>92622010</td>
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<tr>
<td>A/C Guard 20A 220V</td>
<td>92622020</td>
</tr>
<tr>
<td>A/C Guard 25A 115V</td>
<td>92622510</td>
</tr>
<tr>
<td>A/C Guard 25A 220V</td>
<td>92622520</td>
</tr>
</tbody>
</table>

**Protection against:**
- Overload
- High voltage
- Low voltage
- Spikes/surges
- Power-back surges

**Max power** 16, 20, or 25 amps

**Wait time** 4 minutes intelligent time delay

**Ideal for** Air conditioners, large fridge/freezers

**Tip** Rated at up to 25 amps for use with air conditioners up to 44,000 B.T.U (dependent on model)

**Weight** 6 kg

**Dims** 140 x 98 x 78 mm

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### Single phase 30-100 amps

### AVS30 Appliance Guard (Automatic Voltage Switcher)
#### Over and under voltage protection

<table>
<thead>
<tr>
<th>Model</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS30 - Direct wiring</td>
<td>91300000</td>
</tr>
</tbody>
</table>

**Protection against:**
- Overload
- High voltage
- Low voltage
- Spikes/surges
- Power-back surges

**Max power** 30 amps

**Wait time** User adjustable from 10 secs to 10 mins

**Ideal for** Air-conditioners, large fridge/freezers, whole office, and complete circuits

**Tip** Rated at 30 amps for use with air conditioners. Direct wiring adds security of installation

**Weight** 500 gm

**Dims** 210 x 132 x 53 mm

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### AVS100 (Automatic Voltage Switcher)
#### Over and under voltage protection

<table>
<thead>
<tr>
<th>Model</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS100</td>
<td>91100000</td>
</tr>
</tbody>
</table>

**Protection against:**
- Overload
- High voltage
- Low voltage
- Spikes/surges
- Power-back surges

**Max power** 100 amps

**Wait time** User adjustable from 10 secs to 10 mins

**Ideal for** Air-conditioners, large fridge/freezers, whole office

**Tip** Rated at 100 amps for use with a number of air-conditioners and/or whole office or factory. Direct wiring adds security of installation

**Socket availability** None. Direct wiring

**Weight** 6 kg

**Dims** 300 x 180 x 155mm

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For further information on any of the products in this catalogue, visit our website: www.sollatek.com
AVS303 (3 Phase Automatic Voltage Switcher AVS303-xx) (xx=Amps per phase)

Over and under voltage protection

The AVS303 protects against over voltage and under voltage on any one of the three phases as well as loss of one or more phases. Indication and/or disconnection as a result of mains frequency error of phase sequence error is available as an option. The AVS303 incorporates a contactor to switch the full load current (see the AVS3P-0 if you already have switching mechanism in place). The AVS303-xx is available in different sizes ranging from 23 amps to 1250 amps (the –xx relates to the model number, eg. AVS303-23 is a 23 amp per phase AVS303).

Protection against (on any or all phases):
- High voltage
- Low voltage
- Spikes/surges
- Power-back surges
- Any two phases shorting together

Max power
From 23 amps per phase and up to 1250 amps

Wait time
User adjustable from 10 secs to 10 mins

Ideal for
3 Phase air conditioning, industrial refrigeration and industrial plants and machinery

Tip
At a reasonable cost and almost a fraction of that of the equipment, the AVS303 will provide full protection

Socket availability
Direct wiring – standard 3 phase connections

Weight
Dependent on model number

Dims
Dependent on model number

AVS3P-0 (3 Phase Automatic Voltage Switcher control)

Over and under voltage protection

Protects from over voltage and under voltage on any one of the three phases as well as loss of one or more phases. Indication and/or disconnection as a result of mains frequency error or phase sequence error is available as an option. Unlike the AVS303, the AVS3P-0 is designed to operate an external control circuit or contactor which may be part of a motor starter or other equipment. The AVS3P-0 has a volt-free change over contact as an output.

Protection against (on any or all phases):
- High voltage
- Low voltage
- Spikes/surges
- Power-back surges
- Loss or duplication of any phase

Max power
Controls an external 3 phase controller or contactor of any size

Wait time
User adjustable from 10 secs to 10 mins

Ideal For
3 Phase air conditioning, industrial refrigeration and industrial plants and machinery

Tip
The AVS3P-0 has an uncommitted changeover relay output providing normally open and closed contacts rated at 16 amps that can be used to drive external alarms contactors and loads

Socket availability
Direct wiring – standard 3 phase connections

Weight
500 gm

Dims
210 x 132 x 53 mm

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Voltsafe™ Suppressors are devices that protect against surges, spikes, lightning and in some cases RFI (Radio Frequency Interference) and noise. Surge/Spike is a rise or peak in voltage up to thousands of volts and lasts for very short period of time (milliseconds). These powerful events can eventually blow out microscopic holes in electronic circuitry causing severe damage or failure. Unlike over-voltage, which lasts longer (milliseconds to seconds to minutes or even hours), you do not need to switch off the mains to protect against surges and spikes. Clamping to a safe level is the method of protection. The level of protection is best measured in joules and there is no complete protection here but the more joules of protection available the less possibility of damage. A standard surge protector can absorb about 140 Joules. Other factors are important, as in the speed of response, availability of earthing, etc. RFI and noise is generated by nearby equipment such as elevators, motors, radio controlled equipment, etc. Whilst surge/spike protection is incorporated in almost all of the Sollatek range of products, Sollatek in addition manufactures the Suppressors range solely for protection against these events.

Voltsafe™ Suppressors

### Features
- Protection for:
  - Monitors
  - Media Centres
  - Computers
  - Printers

### Specifications
- **Max current**: 13 amps
- **Ideal for**: All electronic appliances
- **Tip**: Especially useful for computers and ideal for home use with video, TV, Hi-fi
- **Response time**: <10 nanoseconds
- **Total energy rating**: 220 joules
- **Max surge current**: 6500kA
- **Weight**: Dependent on model
- **Dims**: 370 x 160 x 70 mm

### Product Table

<table>
<thead>
<tr>
<th>Product</th>
<th>Plug</th>
<th>Socket</th>
<th>Outlets</th>
<th>Cable Length</th>
<th>Switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGX-1U</td>
<td>UK</td>
<td>UK</td>
<td>4</td>
<td>1m</td>
<td>No</td>
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<tr>
<td>MGX-6-1U</td>
<td>UK</td>
<td>UK</td>
<td>6</td>
<td>3m</td>
<td>No</td>
</tr>
<tr>
<td>MGX-6-2U</td>
<td>UK</td>
<td>UK</td>
<td>6</td>
<td>3m</td>
<td>6</td>
</tr>
<tr>
<td>MGX-2S</td>
<td>EU</td>
<td>EU</td>
<td>5</td>
<td>1.8m</td>
<td>1</td>
</tr>
<tr>
<td>MGX-2WS</td>
<td>Indian</td>
<td>WS</td>
<td>4</td>
<td>1.5m</td>
<td>1</td>
</tr>
<tr>
<td>MGX6-2WS</td>
<td>Indian</td>
<td>WS</td>
<td>6</td>
<td>2m</td>
<td>1</td>
</tr>
</tbody>
</table>

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Voltsafe™ Supressors

MultiGuard (MG) Spike/surge protection

- Max current: 13 amps
- Ideal for: All electronic appliances
- Tip: Especially useful for computers and ideal for home use with video, TV, Hi-fi
- Response time: <10 nanoseconds
- Total energy rating: 480 joules
- Max surge current: 4500 amps
- Weight: 500 gm
- Dims: 140 x 60 x 70 mm

SpikeGuard Spike/surge protection

- Protection against:
  - Mains surges/spikes

PureAC Spike/surge and RFI protection

- Protection against:
  - Spikes/surges
  - RFI (radio frequency interference) and noise

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Single & three phase - mains distribution systems

Voltsafe™ DSP range - The Distribution Surge Protector, available in single and 3 phase models - is the first choice for high capacity surge protection. This range is ideally suited to the protection of both entire distribution boards and equipment in domestic and industrial environments. The DSP utilises Metal Oxide Varistor (MOV) technology in its highly reliable protection circuits to ensure that your house, site, facility or plant is completely protected. Fully automatic in operation, DSP is engineered to react immediately, clamping voltage surges generated either internally or externally to a safe level, improving equipment reliability and reducing overall system downtime.

Single Phase – direct wiring

DSP1P-20-T2
Mains spike/surge protection

A directly wired surge protection device (SPD) offering Class II protection. Maximum surge current handling capabilities of 20kA with a maximum let through voltage of 750Vac. Ideally suited to the protection of both entire distribution boards and equipment in domestic and industrial environments. Features LED indication of protection status and requires no operator intervention or maintenance.

Protection against:
- Mains spikes/surges
- Data line spike/surge/lightning protection
  i.e. for telephone/modem/fax lines

Features

<table>
<thead>
<tr>
<th>Protection for</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEMS/ROUTERS</td>
</tr>
<tr>
<td>FAX MACHINES</td>
</tr>
<tr>
<td>TELEPHONES</td>
</tr>
</tbody>
</table>

Max power: 12 amps
Mains surge/spike protection: 160 joules
Mains surge/spike discharge: 6.5kA (8/20μs)
Data surge/spike discharge: >5kA
Max power: >10kA (8/20 s)
Protective mode: L-N, L-E, N-E
Ideal for: Modem, fax, telephone, routers
Tip: Ideal for protection of computer data, internet, modems, fax machines and telephones
Socket availability: Mains plus telephone connection
Weight: 195 gm
Dims: 140 x 60 x 90 mm

Note: The CommsGuard and LightningGuard are similar in that they both protect against spikes and surges on both data line and mains. However the LightningGuard adds over-voltage protection on the mains, by disconnecting on over-voltage, with subsequent built-in start-up delay.

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Designed to provide primary high capacity protection in industrial applications, the DSP3P-170 is a class II device and offers all-mode protection and maximum surge handling capability of 170kA. Enclosed in a IP66 rated enclosure design.

Max surge current (8/20μ) 170kA
Let through voltage @3kA 750V
Enclosure IP66
Indication Green LED on: Protection present
Green LED off: Internal failure
Remote contacts Optional
Weight 3.2Kg
Dims 214 x 297 x 123 mm

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Stabilisers (also known as regulators) stabilise the incoming power supply providing constant voltage to the equipment. Sollatek manufactures two different ranges of stabilisers:

**SVS** (Sollatek Voltage Stabilisers) range.

**AVR** (Automatic Voltage Regulators) range.

The table opposite is a brief comparison between the two ranges.

### AVR AND SVS COMPARISON

<table>
<thead>
<tr>
<th></th>
<th>AVR</th>
<th>SVS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>Microprocessor</td>
<td>Microprocessor</td>
</tr>
<tr>
<td>Switching</td>
<td>Taps/Triacs</td>
<td>Taps/Relays</td>
</tr>
<tr>
<td>Speed of correction</td>
<td>720V/S</td>
<td>750V/S</td>
</tr>
<tr>
<td>Input range</td>
<td>-30% to +22%</td>
<td>-26% to +19%</td>
</tr>
<tr>
<td>Output accuracy</td>
<td>±4%</td>
<td>±4%</td>
</tr>
<tr>
<td>AVS function</td>
<td>Yes (Disconnects the mains supply if the input varies outside pre-set limits and reconnects automatically. For a 230V system these are below 145V or above 290V)</td>
<td>No</td>
</tr>
<tr>
<td>Weight (of a 2Amp unit)</td>
<td>About 5Kg</td>
<td>About 2Kg</td>
</tr>
<tr>
<td>Suitable for</td>
<td>All electrical and electronic equipment. However if the price doesn’t justify it, then use with only sensitive equipment. Like HI-FI, Video, TV, Lab equipment, etc.</td>
<td>All electrical and electronic equipment. If wider input and more accurate output control is desired then use the AVR.</td>
</tr>
</tbody>
</table>

### Economy Range - Stab

**Description**

As both high and low mains voltage can damage your electrical equipment, the Sollatek TV-Stab, Fridge-Stab and A/C-Stab are designed to monitor and correct the incoming supply continuously. If the voltage rises or drops, they will correct the output to ensure that the voltage reaching your equipment remains within the operating range of the appliances connected to them.

The Sollatek TV-Stab, Fridge-Stab and A/C-Stab are easy to use, with a red LED indicating a problem with the voltage input, and a green LED indicating good input, and have an on/off switch to power the unit.

**Applications**

Suitable for all electrical and electronic appliances, including: washing machines, computers, fridges, TV, and satellites, and A/C units.

### Single phase up to 2 amps

#### TV-Stab

**Voltage regulation and stabilisation**

- **Model**
  - 99MT0102-EU TV-STAB-102M-EU 1A
  - 99MT0102-R6 TV-STAB-102M-R6 1A
  - 99MT0102-UK TV-STAB-102M-UK 1A
  - 99MT0202-EU TV-STAB-202M-EU 2A
  - 99MT0202-R6 TV-STAB-202M-R6 2A
  - 99MT0202-UK TV-STAB-202M-UK 2A

The TV-Stab & Fridge-Stab will ensure that high and low voltage is stabilised to a safe working level for your appliance to operate properly. They will also protect it by disconnecting the power when it reaches a very high or very low level.

- Wide input voltage range
- Excellent output voltage stability
- Incorporates circuit breaker
- Over voltage & under voltage disconnect
- Startup delay (10sec TV-Stab, 3min Fridge-Stab)

#### Fridge-Stab

**Voltage regulation and stabilisation**

- **Model**
  - 99MF0102-EU FRIDGE-STAB-102M-EU 1A
  - 99MF0102-R6 FRIDGE-STAB-102M-R6 1A
  - 99MF0102-UK FRIDGE-STAB-102M-UK 1A
  - 99MF0202-EU FRIDGE-STAB-202M-EU 2A
  - 99MF0202-R6 FRIDGE-STAB-202M-R6 2A
  - 99MF0202-UK FRIDGE-STAB-202M-UK 2A

#### Protection against:

- High voltage
- Low voltage (Fridge-Stab only)
- Spikes/surges
- Power-back surges

**Features**

- Microprocessor control
- AVS function
- Circuit breaker
- Overload protection

**Protection for**

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
A/C-Stab
Voltage regulation and stabilisation

The A/C-Stab will ensure that low voltage and high voltage is brought to a safe working level for your air conditioner to operate properly and to cool efficiently. It will also protect by disconnecting the power when it rises to a very high level or drops to a very low level. A built in startup delay will protect against power back surges and prevent frequent switching on and off due to fluctuations.

- Wide input voltage range
- Excellent output voltage stability
- Incorporates circuit breaker
- 3 minute startup delay

Protection against:
- High voltage
- Low voltage
- Spikes/surges
- Power-back surges

Standard Range - SVS

The Sollatek SVS monitors the mains voltage continuously. If the voltage rises or drops, the SVS will stabilise the output to ensure the voltage reaching your equipment remains constant at 230V (+/- 6%), within the operating range of the unit. If the input voltage falls below 142V or rises above 295V, the SVS will disconnect the output, thereby protecting the load. Once the mains voltage returns again within acceptable limits, the SVS will reconnect the output following a start up delay.

(All above voltages are for a 220/230V system. For other voltages contact Sollatek).

Protection:
- Microprocessor controlled stabiliser
- Very wide input voltage range
- Excellent output voltage stability (+/-6%)
- Includes surge and spike suppression
- Extremely fast response
- Incorporates over voltage & under voltage disconnect
- 10 second start-up delay as standard (modifiable)
- Incorporates TIMESAVE™ function. See page 10
- British design

Single phase up to 16 amps

Sollatek Voltage Stabiliser (SVS)
Over and under voltage stabilisation protection

Protection against:
- High voltage
- Low voltage
- Spikes/surges
- Power-back surges

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Voltright™
Stabilisers/Regulators

Single phase 20 - 75 amps

Sollatek Voltage Stabiliser (SVS)
Over and under voltage stabilisation protection

Protection against:
- High voltage
- Low voltage
- Spikes/surges
- Power-back surges

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Amps</th>
<th>VA@240V</th>
<th>Socket</th>
<th>Weight</th>
<th>Dims</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVS20-22 C</td>
<td>20</td>
<td>4800</td>
<td>Cable</td>
<td>14.0</td>
<td>162 x 132 x 275</td>
</tr>
<tr>
<td>SVS20-22 T</td>
<td>20</td>
<td>4800</td>
<td>Terminal</td>
<td>14.0</td>
<td>162 x 132 x 275</td>
</tr>
<tr>
<td>SVS20-22 WM*</td>
<td>20</td>
<td>4800</td>
<td>Terminal</td>
<td>29.0</td>
<td>300 x 200 x 280</td>
</tr>
<tr>
<td>SVS50-22 WM*</td>
<td>50</td>
<td>12000</td>
<td>Direct wiring</td>
<td>29.0</td>
<td>330 x 330 x 440</td>
</tr>
<tr>
<td>SVS75-22 WM*</td>
<td>75</td>
<td>18000</td>
<td>Direct wiring</td>
<td>38.0</td>
<td>330 x 330 x 440</td>
</tr>
</tbody>
</table>

* Wall mountable units

Three phase SVS models are available. Refer to Sollatek for more details

Professional Range - AVR

The Sollatek AVR is a state of the art solid state stabiliser. Using microprocessor technology, the AVR will rapidly detect voltage variations and correct the output to ensure 230V (+/-4%) supply. The Sollatek AVR has a very wide input range (-30% to +22%) and a voltage correction speed of 1250 Volts per second. No mechanical parts means that the AVR doesn’t require maintenance and will not be affected by dusty environments as other mechanical (for example Servo type) stabilisers.

Features:
- Microprocessor controlled – high speed response
- Stabilises output to within +/-4%
- Corrects input change of more than -30% to +22%
- A staggering 1250V/second correction speed
- Rapid response time of within 15 milliseconds
- Sizes available: from 1 amp single phase up to 3000 amps per phase - three phase
- Ideal for sensitive electronic office equipment, computers, TV & video, electronic medical and laboratory equipment, and telecom applications
- Suitable for all applications for domestic and office use
- Built into an attractive housing to blend with modern equipment
- LED display – shows Input voltage level, output voltage level, Load current and overload
- Overload protection – by measuring the load current, the AVR will switch the unit off if the current exceeds the AVR’s rating

Single phase 20 - 75 amps

Automatic Voltage Regulator (AVR)
Over and under voltage stabilisation protection

The Sollatek single phase AVRs are suitable for all applications for domestic and small office use. This range of AVRs is built into an attractive and modern enclosure to blend in with modern equipment.

<table>
<thead>
<tr>
<th>Model</th>
<th>Amps</th>
<th>Voltage</th>
<th>VA</th>
<th>Weight (Kg)</th>
<th>Dims (mm)</th>
<th>Socket availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVR01-22</td>
<td>1</td>
<td>230</td>
<td>230</td>
<td>4</td>
<td>193 x 100 x 124</td>
<td>UK, EU, IND6</td>
</tr>
<tr>
<td>AVR02-22</td>
<td>2</td>
<td>230</td>
<td>460</td>
<td>5</td>
<td>193 x 100 x 124</td>
<td>UK, EU, IND6</td>
</tr>
<tr>
<td>AVR05-22</td>
<td>5</td>
<td>230</td>
<td>1150</td>
<td>12</td>
<td>277 x 133 x 161</td>
<td>UK, EU, IND6</td>
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<tr>
<td>AVR10-22</td>
<td>10</td>
<td>230</td>
<td>2300</td>
<td>15</td>
<td>330 x 212 x 179</td>
<td>UK, EU, IND6</td>
</tr>
</tbody>
</table>

For full specifications and part numbers please refer to the Sollatek Voltright AVR Range brochure.

Features:
- Microprocessor controlled – high speed response
- Stabilises output to within +/-4%
- Corrects input change of more than -30% to +22%
- A staggering 1250V/second correction speed
- Rapid response time of within 15 milliseconds
- Sizes available: from 1 amp single phase up to 3000 amps per phase - three phase
- Ideal for sensitive electronic office equipment, computers, TV & video, electronic medical and laboratory equipment, and telecom applications
- Suitable for all applications for domestic and office use
- Built into an attractive housing to blend with modern equipment
- LED display – shows Input voltage level, output voltage level, Load current and overload
- Overload protection – by measuring the load current, the AVR will switch the unit off if the current exceeds the AVR’s rating

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Voltright™
Stabilisers/Regulators

Single phase 20 to 400 amps

Automatic Voltage Regulator (AVR)
Over and under voltage stabilisation protection

Protection against:
- High voltage
- Low voltage
- Spikes/surges

Features:
- Suitable for large applications covering a small office to an entire apartment or house or even a small workshop
- LCD display (optional on certain models) – shows input voltage level, output voltage level, load current and overload

<table>
<thead>
<tr>
<th>Model</th>
<th>Amps</th>
<th>Voltage</th>
<th>kVA</th>
<th>Weight (Kg)</th>
<th>Dims (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVR20-22</td>
<td>20</td>
<td>230</td>
<td>4.8</td>
<td>40</td>
<td>347 x 215 x 520</td>
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<tr>
<td>AVR30-22</td>
<td>30</td>
<td>230</td>
<td>6.9</td>
<td>55</td>
<td>347 x 215 x 520</td>
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<tr>
<td>AVR40-22</td>
<td>40</td>
<td>230</td>
<td>9.2</td>
<td>60</td>
<td>347 x 215 x 520</td>
</tr>
<tr>
<td>AVR50-22</td>
<td>50</td>
<td>230</td>
<td>11.5</td>
<td>82</td>
<td>350 x 350 x 585</td>
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<tr>
<td>AVR75-22</td>
<td>75</td>
<td>230</td>
<td>17.2</td>
<td>100</td>
<td>350 x 350 x 585</td>
</tr>
<tr>
<td>AVR100-22</td>
<td>100</td>
<td>230</td>
<td>23.0</td>
<td>114</td>
<td>350 x 350 x 585</td>
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<tr>
<td>AVR300-22</td>
<td>300</td>
<td>230</td>
<td>69.0</td>
<td>382</td>
<td>1200 x 680 x 1030</td>
</tr>
<tr>
<td>AVR400-22</td>
<td>400</td>
<td>230</td>
<td>92.0</td>
<td>423</td>
<td>1200 x 680 x 1030</td>
</tr>
</tbody>
</table>

Up to 3000A per phase available

Three phase 20 amps up to 3000 amps (2mVA) per phase

Automatic Voltage Regulator (AVR)
Over and under voltage stabilisation protection

The Sollatek three phase AVR is made of three identical single phase regulator units providing independent control. The three phase range boasts the same standard features with one of the widest ranges as standard in the industry. Numerous options are available, making the three phase range a very comprehensive source of secure, stable power.

Protection against:
- High voltage
- Low voltage
- Spikes/surges

Features:
- Input range: -30% to +22% as standard. (narrower range is available on request - +/-15%)
- AVS option provides added protection against extremes of high and low voltages (optional). See page 8
- Input / output voltage and current meters (optional)
- Additional surge / spike suppression. Up to 3 x 1280 joules

Protection against:
- High voltage
- Low voltage
- Spikes/surges

For full specifications and part numbers please refer to the Sollatek Voltright AVR Range brochure.

<table>
<thead>
<tr>
<th>Model</th>
<th>Amps</th>
<th>Voltage</th>
<th>kVA</th>
<th>Weight (Kg)</th>
<th>Dims (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVR3x20-22</td>
<td>20</td>
<td>230/400</td>
<td>13.8</td>
<td>100</td>
<td>450 x 635 x 850</td>
</tr>
<tr>
<td>AVR3x30-22</td>
<td>30</td>
<td>230/400</td>
<td>20.7</td>
<td>150</td>
<td>450 x 635 x 850</td>
</tr>
<tr>
<td>AVR3x50-22</td>
<td>50</td>
<td>230/400</td>
<td>34.5</td>
<td>210</td>
<td>500 x 695 x 1080</td>
</tr>
<tr>
<td>AVR3x75-22</td>
<td>75</td>
<td>230/400</td>
<td>51.7</td>
<td>285</td>
<td>600 x 735 x 1110</td>
</tr>
<tr>
<td>AVR3x100-22</td>
<td>100</td>
<td>230/400</td>
<td>69.0</td>
<td>400</td>
<td>500 x 825 x 1280</td>
</tr>
<tr>
<td>AVR3x150-22</td>
<td>150</td>
<td>230/400</td>
<td>103.5</td>
<td>450</td>
<td>500 x 825 x 1280</td>
</tr>
<tr>
<td>AVR3x250-22</td>
<td>250</td>
<td>230/400</td>
<td>172.5</td>
<td>675</td>
<td>680 x 1200 x 2070</td>
</tr>
<tr>
<td>AVR3x300-22</td>
<td>300</td>
<td>230/400</td>
<td>207.0</td>
<td>735</td>
<td>680 x 1200 x 2070</td>
</tr>
<tr>
<td>AVR3x400-22</td>
<td>400</td>
<td>230/400</td>
<td>276.0</td>
<td>790</td>
<td>680 x 1200 x 2070</td>
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<tr>
<td>AVR3x600-22</td>
<td>600</td>
<td>230/400</td>
<td>483.0</td>
<td>1200</td>
<td>1360 x 1200 x 2070</td>
</tr>
<tr>
<td>AVR3x700-22</td>
<td>700</td>
<td>230/400</td>
<td>552</td>
<td>1590</td>
<td>1360 x 1200 x 2070</td>
</tr>
<tr>
<td>AVR3x800-22</td>
<td>800</td>
<td>230/400</td>
<td>621</td>
<td>1700</td>
<td>1360 x 1200 x 2070</td>
</tr>
<tr>
<td>AVR3x1000-22</td>
<td>1000</td>
<td>230/400</td>
<td>690</td>
<td>1850</td>
<td>2040 x 1200 x 2070</td>
</tr>
</tbody>
</table>

Up to 3000A per phase available

Larger sizes available. Refer to Sollatek for details

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
The Sollatek isolating AVR is a version of the standard Sollatek AVR. Designed specifically to provide the high level of protection required for telecommunication applications and for equipment that requires a higher level of surge, spike, and noise protection. Using an isolating transformer, the AVR provides a clean neutral and 10:1 attenuation ratio ensuring that noise on the output is significantly reduced relative to the input.

Table: Model Amps per phase Voltage KVA Weight kg Dims (DxWxH) mm
<table>
<thead>
<tr>
<th>Model</th>
<th>Amps per phase</th>
<th>Voltage</th>
<th>KVA</th>
<th>Weight kg</th>
<th>Dims (DxWxH) mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolating AVR (I)</td>
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<tr>
<td>AVR3x12-22-I</td>
<td>12</td>
<td>230/400</td>
<td>8.3</td>
<td>175</td>
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<tr>
<td>AVR3x20-22-I</td>
<td>20</td>
<td>230/400</td>
<td>13.8</td>
<td>250</td>
<td>700 x 930 x 1450</td>
</tr>
<tr>
<td>AVR3x30-22-I</td>
<td>30</td>
<td>230/400</td>
<td>20.7</td>
<td>350</td>
<td>700 x 930 x 1450</td>
</tr>
<tr>
<td>AVR3x50-22-I</td>
<td>50</td>
<td>230/400</td>
<td>34.5</td>
<td>400</td>
<td>700 x 930 x 1450</td>
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<td>AVR3x75-22-I</td>
<td>75</td>
<td>230/400</td>
<td>51.7</td>
<td>500</td>
<td>700 x 930 x 1450</td>
</tr>
<tr>
<td>AVR3x100-22-I</td>
<td>100</td>
<td>230/400</td>
<td>89.0</td>
<td>650</td>
<td>900 x 1200 x 1750</td>
</tr>
<tr>
<td>AVR3x150-22-I</td>
<td>150</td>
<td>230/400</td>
<td>103.5</td>
<td>1000</td>
<td>900 x 1200 x 1750</td>
</tr>
</tbody>
</table>

These models as standard include various additional features that are normally provided as optional extras. These include a higher IP rating of 44 to allow outdoor installation. The standard inclusion of output circuit breaker, manual by pass and automatic voltage switcher function all make this unit the preferred choice for mission critical applications.

Features
- Designed for telecom and sensitive applications.
- Designed for remote operation where a high degree of reliability is essential.
- Input delta/star isolating transformer.
- Weatherproof enclosure.
- Fully electronic solid state with no moving parts for:
  - High reliability.
  - Speed of operation.
  - Immunity to dust and other environmental conditions.

Options
- AVS
- Input circuit breaker
- Output circuit breaker
- Class II surge and spike protection
- Enhanced Input Voltage 90V
- Phase selector
- Isolating transformer
- Digital meters
- Outdoor enclosure (IP44)
- Changeover switch
- Class I & II lightning, surge and spike protection
- Wide input voltage
- Manual bypass switch

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Voltsure™ UPS (Uninterruptible Power Supplies)

Power problems - surges, brownouts and utility failures - can place your business at great risk. The busier and more complex your computing network, the greater the risk. And if power failure means productivity loss, this threatens your company’s performance and profitability - and perhaps even its very existence. Yet an uninterruptible power supply (UPS) is easy to install and its cost will be quickly recovered. Given the potential price of power failure, an effective UPS is indispensable.

Line -interactive range  400VA to 2000VA

The Sollatek Ultima Range - available in 400, 600, 800VA, 1000, 1400 and 2000VA ratings - is the perfect line interactive UPS for stand alone PCs and SoHo workstations. It protects your network equipment from power surges, brownouts and utility failures at a competitive cost. Its compact design features tighter output voltage and frequency regulation, RS232 and USB communications port, and modem/data line protection.

Power Management Software

The Sollatek Ultima LCD features the WinPower software; a powerful UPS monitoring tool which provides user-friendly interface to monitor and control your inverter system. This software provides complete power protection for your computer system while encountering power failure. With this software, users can monitor any UPS status on the same LAN. Furthermore, any UPS can protect any PC on the same LAN.

ULTIMA (Line-interactive UPS)
Uninterruptible power supply

<table>
<thead>
<tr>
<th>Model</th>
<th>Amps</th>
<th>Capacity</th>
<th>kVA</th>
<th>Weight (Kg)</th>
<th>Dims (mm)</th>
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<td>400VA/240W</td>
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<td>Ultima 600</td>
<td>600VA/360W</td>
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<tr>
<td>Ultima 800</td>
<td>800VA/480W</td>
<td>6.5</td>
<td>330 x 100 x 140</td>
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<tr>
<td>Ultima 1000</td>
<td>1000VA/600W</td>
<td>9.6</td>
<td>405 x 145 x 205</td>
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</tr>
<tr>
<td>Ultima 1400</td>
<td>1400VA/840W</td>
<td>9.7</td>
<td>405 x 145 x 205</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ultima 2000</td>
<td>2000VA/1080W</td>
<td>9.8</td>
<td>405 x 145 x 205</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Features:

- Microprocessor controlled line interactive UPS.
- Automatic Voltage Regulator (AVR) function with two boost and one buck taps. See page 21 for more information.
- RS232 and USB communications port with software for controlling the PC for safe shutdown and UPS parameter reporting via user friendly interface.
- Unique system for charging battery even during a brown out (If the load is off).
- Short circuit and overload protection.
- Cold start feature for load shedding environments.
- Bad battery detection and advance replacement notification (3 months ahead).
- Free power monitoring and PC shutdown software included.
- Green power function for energy saving.
- DC start function.
- Auto restart while AC recovery.
- Compact size and light weight.
- Provides modem/phone line surge protection.

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
**Voltsure™ UPS (Uninterruptible Power Supplies)**

**Ultima LCD**
Uninterruptible power supply

**Features**:
- Microprocessor controlled line interactive UPS.
- Automatic Voltage Regulator (AVR) function with two boost and one buck taps. See page 21 for more information.
- RS232 and USB communications port with software for controlling the PC for safe shutdown and UPS parameter reporting via user friendly interface.
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- Green power function for energy saving.
- DC start function.
- Auto restart while AC recovery.
- Compact size and light weight.
- Provides modem/phone line surge protection.

**Protection against:**
- High voltage
- Low voltage
- Spikes/surges
- Power-back surges
- RFI and noise
- Lightning
- Power cuts
- Telecom surges

**Socket availability**
- UK 13amp European (Euro)

**Features:***
- **2000 VA**
- **AVR FUNCTION**
- **DISPLAY**

**Model**
- **ULTIMA UPS 650 LCD EURO**
- **ULTIMA UPS 850 LCD UK**
- **ULTIMA UPS 850 LCD EURO**
- **ULTIMA UPS 850 LCD UK**
- **ULTIMA UPS 1K LCD EURO**
- **ULTIMA UPS 1K LCD UK**
- **ULTIMA UPS 1.5K LCD EURO**
- **ULTIMA UPS 1.5K LCD UK**
- **ULTIMA UPS 2K LCD EURO**
- **ULTIMA UPS 2K LCD UK**

**Protection for:**
- **115V/230V**
- **MONITORS**
- **COMPUTERS**
- **CASH MACHINES**
- **TELEPHONES**

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
The Sollatek PowerBack is a battery-based system made up of two basic components; an inverter/charger and a set of DC batteries. The inverter/charger converts AC power from the grid to DC to charge the batteries. When power from the grid is lost, the inverter converts the DC battery power to AC for use in the home or office. The PowerBack can provide mains-like power for all your essential appliances and lights. The PowerBack charges the batteries when mains power is available.

The backup time the PowerBack can provide in a power cut depends on its overall capacity (determined by the number of the batteries connected and their state of charge), as well as the type and number of appliances connected to it.

- Transfer time configurable to cope with Genset output power.
- Three step intelligent charging to reduce recharge time.
- Intelligent fan cooling determined by the load.
- Supports heavy duty appliances e.g. air conditioners.
- Comprehensive LCD display.
- Fully configurable by end user.
- Power Saving Mode.
- Overload, short circuit, high temperature protection.
- Low battery alarm.
Prevents damage to equipment from over or under voltage levels of long duration. Works by disconnecting power when voltage level exceeds set parameters. Reconnects again when power returns inside parameters for a pre-set period. Fully automatic operation. All switchers include other protection features.

Spikes/Surge: Very short, (one millisecond) event of very high surge in voltage to thousands of volts and amps. Spikes are common in all parts of the world and repeated exposure to spikes will damage electronic equipment and corrupt data. **What causes it?** Switching on/off of nearby equipment, lightning, motors starting etc.

**RFI (Radio Frequency Interference)/Noise:** High frequency disturbances that occur within a short period of time (milliseconds). RFI & noise are very common in all parts of the world and are the main cause of data corruption. **What causes it?** Generated by high frequency noise from nearby equipment like TV, radio equipment, transmitters, mobile phones, switching on/off of certain loads, fluorescent lights, motor speed controls, light dimmers.

Over-Voltage: Long duration (milliseconds, seconds, minutes, hours or days) rise in the voltage above acceptable limits. Depending on the level of the over-voltage, the damage can be instantaneous, severe and irreparable. **What causes it?** On return of mains supply after power cuts, under-sized utility oscillating between periods of brown-outs and over-voltage or accidental (e.g. accidental connection between two phases).

Brown-Out/Under-Voltage: Long duration of low voltage (milliseconds to seconds, minutes, hours or days). **What causes it?** Most commonly an over-stretched utility, especially in areas of poor power distribution infrastructure and remote areas. Common in dry seasons where water is used for electricity generation.

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
<table>
<thead>
<tr>
<th></th>
<th>Voltsafe™ Suppressor Range</th>
<th>Voltright™ Stabiliser and Regulator Range</th>
<th>Voltsure™ UPS Range</th>
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<tr>
<td><strong>Description</strong></td>
<td>Stops short-term disturbances, created by lightning strikes, power stations or nearby equipment switching on &amp; off, from causing damage.</td>
<td>Ensures equipment can still operate although the voltage level is outside its ‘normal’ range, by automatic correction within set levels.</td>
<td>Keeps equipment operating temporarily in a blackout by using standby battery power.</td>
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<tr>
<td><strong>Protection</strong></td>
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<td><strong>Components</strong></td>
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<td>ConnoGuard</td>
<td>MultiGuard</td>
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<td>PureAC</td>
<td>Distribution Surge Protector</td>
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<td>TV-Stab</td>
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<td>A/C-Stab</td>
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<td>Voltsure LCD</td>
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<td><strong>Performance</strong></td>
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<td>1 to 75</td>
<td>1.3 to 2</td>
<td>1.3 to 5</td>
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<td>1 to 400</td>
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<td>12/15</td>
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<td>20 to 3000</td>
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<td><strong>Protection Levels</strong></td>
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<td><strong>Surge Protection</strong></td>
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<tr>
<td><strong>Performance</strong></td>
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</tbody>
</table>

**Lightning:** Direct or nearby strikes can cause minor problems or severe disturbances and damage. Lightning produces spikes/surges, over-voltage or power cuts. 

**What causes it?** The surge is generated by either a direct hit, or indirectly striking underground or overhead lines and transmitting high surges to connected equipment in nearby buildings.

**Power-cuts:** Common in every country in the world, especially in areas of frequent voltage problems. Sudden loss of power can cause damage ranging from corruption of data to mechanical faults as equipment is stopped while in operation.

**What causes it?** Power or sub station failure, breakdown in the distribution network, or simply a plug being pulled out accidentally.

**Power-Back Surges:** These typically occur when power returns after a power-cut and connected equipment receives a surge of electricity at an over-voltage level, which can be very damaging (see above).

**What causes it?** Power back surges are created by the utility, when it restores supply at an above normal voltage in order to compensate for the demand as connected equipment re-starts simultaneously.

**Telecom surges, spikes and lightning:** Short term, high voltage and current phenomena occurring on the telephone lines. Can cause irreparable damage to any piece of equipment connected to the incoming line. The telephone line itself may even be damaged or destroyed in severe cases.

**What causes it?** Telecom spikes are caused by lightning striking either the telephone line directly or an object near it.

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Solar power products and systems

SOLLATEK designs, manufactures and installs a wide variety of solar related products. Whilst being one of the world’s largest suppliers of OEM products, Sollatek also has extensive expertise in supplying bespoke solar systems. Thousands of solar systems have now been installed around the world, many for large developments supported and financed by the World Bank.

PRINCIPAL SOLAR ENERGY PRODUCTS Sollatek’s range of solar energy products includes:

**Solar Energy Systems**  Sollatek provide a complete turnkey solution to the telecom industry for the design, supply and installation of solar power systems tailored to their practical requirements.

**Solar Charge Controllers**  Units ranging in size from 6A to 960A for 12V, 24V and 48V applications.

**SLK4 Solar Lighting Kit**  Self assembly low cost 4 lights solar lighting kit for home/domestic use.

**Solar Lights**  LED, SOX, and PL lights for indoor, outdoor and street lighting applications in 12V, 24V and 48V capacities.

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Solar Modules  Available in mono and multicrystalline versions. From 10Wp to 280Wp.

Solar Street lighting  Specialised bespoke street lighting and luminaires in areas where the electricity supply is unavailable. Available in LED, SOX, and PL ranges.

Batteries  Designed for professional applications, the range encompasses VRLA and wet technology with both tubular and flat plates, and a capacity range from 20Ah to 15,600Ah.

Glowstar  The Glowstar lantern provides simple, portable, affordable solar powered lighting designed for virtually any environment where the electricity supply is inconsistent, or unavailable. Typical uses range from remote rural households and hospitals, to camping and caravanning.

For further information on any of our Solar products, please see the Sollatek Solar catalogue.

For further information on any of the products in this catalogue, visit our website: www.sollatek.com
Global and Local

With customers across the world and a local presence in more than 50 countries, Sollatek is able to provide support services wherever you are.

<table>
<thead>
<tr>
<th>Algeria</th>
<th>Egypt</th>
<th>Jordan</th>
<th>Nigeria</th>
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