

What Power Problems can arise ?

The Best Power National Power Laboratory's unprecedented five-year Power Quality Study (1990-1995) estimated that the average computer is subjected to 289 potentially damaging power disturbances per year. That is more than one every business day !! Obviously computers are not the only piece of electronic equipment affected by Power Problems..

Take a look below are you experiencing any of these problems



1
POWER FAILURE

SURGES AND OVER VOLTAGES: Commonly caused by large electrical load changes and from Power line switching – resulting in potential damage.

Suggested Solutions: *Power line conditioner, UPS with voltage regulation, Plug-in surge protector (Domestic Filters and protectors)*



2
POWER SAG

SAGS/BROWNOUTS: These are short term, low voltage brownouts, created usually by startup of large loads/lightning/utility switching and equipment failure. Sag/brownouts cause hardware crashes and occasional hardware damage.

Suggested Solutions: *Power line conditioner, UPS with under and over voltage.*



3
POWER SURGE

SPIKES: Also called transient, instantaneous surges. Spikes cause data corruption, data lockups and immense hardware damage.

Suggested Solutions: *UPS with surge suppressor, plug in surge protector – or – mains spike/filter.*



4
UNDER VOLTAGE

RF NOISE: Creates a rough and jagged sine wave. Noise can be generated even by normal computer operation. It causes keyboard lockups, program freezes and data corruption.

Suggested Solutions: *UPS with noise filter, plug in surge protector – or - RF mains filter.*



5
OVER VOLTAGE

WAVEFORM DISTORTION: Most common is the harmonic distortion. A doubling of the normal sine wave. This condition can be triggered by factory equipment, utility power.

Suggested Solution: *True on line double conversion UPS, High Quality switchboard surge filter, power line conditioner.*



6
ELECTRICAL LINE NOISE

FREQUENCY VARIATIONS: Are usually caused by back up generators taking over from utility power. Only on-line UPS systems can handle these.

Suggested Solution: *True on-line double conversion UPS, High Quality switchboard surge filter, Power line conditioner.*



7
FREQUENCY VARIATION

COMPLETE OUTAGE...BLACKOUT: Described as 0 volts condition for longer than half a cycle. Unprotected networks suffer badly during an outage.

Suggested Solution: *Either a stand-by or on-line UPS.*



8
SWITCHING TRANSIENT



9
HARMONIC DISTORTION

For further information regarding Power Problems that you may be experiencing please do not hesitate to contact your local Power On Australia office by calling 1300 66 24 35.