



VERY IMPORTANT
 In order to validate your warranty it is essential that you register it.
 Warranties must be registered online
 Please register your warranty by visiting
www.powershield.com.au

1. Introduction

Thank you for purchasing CompuGuard 650. It is designed to provide safe and reliable power protection for your computer equipment (Not for server application).

Before you start using the product, please read this user's manual.

It contains instructions relating to safety, installation, operation maintenance and warranty.

Please keep this manual in a safe place for future use.

2. Safety instruction

Please read following safety instruction carefully before using CompuGuard 650



ATTENTION !: ELECTRICAL SAFETY.

- To prevent the risk of fire and electric shock, install the product in a controlled temperature and humidity indoor area where it is free from conductive contaminants.
- To reduce the risk of overheating of the product, do not cover the cooling vent holes and avoid exposing the unit under direct sunlight or installing the unit near heat emitting appliances such as heaters or furnaces.
- Do not connect non computer related equipment such as medical equipment, life-support system, microwave oven, vacuum cleaners. Also since this unit output is not sinusoidal, please do not connect AC line filters, motors and other inductive / capacitive equipment. This equipment might damage the unit.

- Do not plug the unit input cord to its own output.
- Do not allow liquids or any foreign object to get inside the unit. Do not place any liquid formed materials on the top of the unit or right next to it.
- For safety purpose, proper grounding is necessary during installation of the unit in order to reduce the leakage current below 3.5mA.
- Hazardous due to electric shock. Although, unit is disconnected from the mains, hazardous voltage may still be accessible through supply from the battery. Battery connection should be disconnected when servicing the product.
- Do not attempt to open enclosure for modification and service, there are no serviceable parts inside the unit. Modification applied to this unit void product warranty.



CAUTION : BATTERY SAFETY

- There is no serviceable part in this product. Please visit our web page when you require service of your product including replacing battery. www.powershield.com.au for further information on service of the product.
- Do not dispose of batteries in a fire. The battery may explode. Do not open or mutilate the battery. Released electrolyte is harmful to the skin and eyes.
- A battery can present a risk of electric shock and high short circuit current.
- This unit contains no serviceable components. Repairing of the product must only be performed by qualified service personnel.

3. Package Contents

You should have received the following items inside of package.

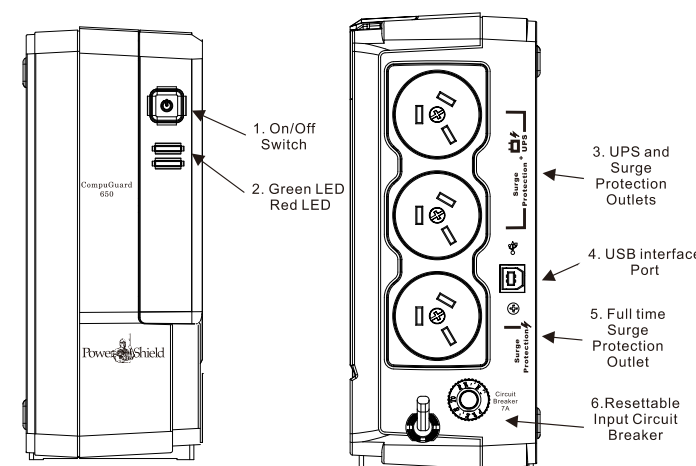
- PowerShield CompuGuard650
- PowerShield CompuGuard User's manual.
- USB communication cable
- NetGuard Monitoring software CD

Note : Before installation, please inspect the unit and make sure that no damages have occurred during transit. If any damage is found, please notify your dealer. Please keep the shipping materials in the event the product must be returned to a repair center for service.

4. Product Overview

PowerShield CompuGuard will protect your computer and other computer devices from various power disturbances including black out.

Front and Rear View :



1. On/Off Switch

Turn on and off unit with and without utility.

2. LED indicator.

See 7. "LED and Beeper" section for detail

3. UPS and Surge Protection outlets

These outlets provide backup power when main has failed and units turned on. Connect peripherals that need battery backup protection.

NOTE : This product only detects Overload condition during on battery operation. Please turn off and turn on or perform battery selftest from software when you increase amount of load connected to these outlets.

4. USB interface port

Connect USB cable and computer. Install NetGuard UPS monitoring software for advanced power protection.

5. Full time Surge Protection Outlet.

This outlet does NOT provide battery backup when mains has failed. This outlet provides continuous protection against surges and spikes. Connect peripheral that does not require battery backup.

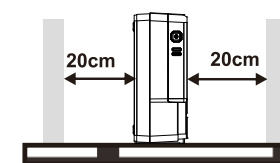
6. Resettable input circuit breaker.

Breaker will trip when there is overload / short circuit occurs at output of the unit.

The circuit breaker rating is rated at 7Amp

5. Installation and Start up

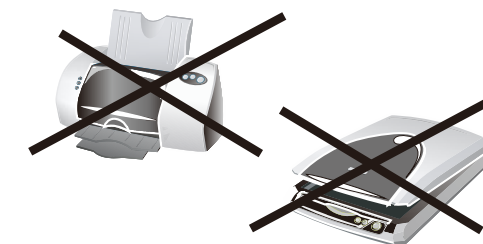
Install the unit in a controlled environment area that is free from dust and has adequate sir for ventilation.



Plug the AC input corn into the wall outlet and turn the unit on by pressing on/off button to recharge the battery. Please allow 8 hours to recharge the battery.



Never ! Connect a laser printer/ scanner, AC line filer, vacuum cleaner and motor to the UPS outlets. This may cause the damage to the unit.



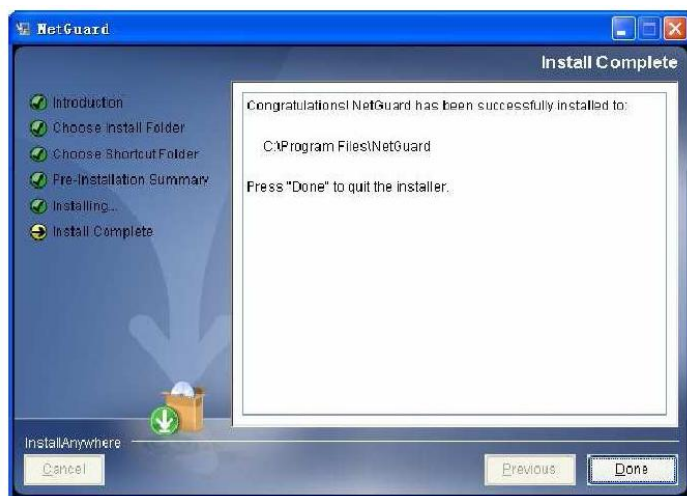
6. Software Installation.

1. Insert NetGuard CD into PC and run autorun.exe to start the installation of the software.

2. PC will show following menu below.

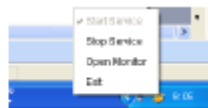


Click install button and the installation starts.



Please follow instruction on the screen and complete the software installation.

3. After all installation is completed the icon below appears on the taskbar of your desktop. To launch GUI of NetGuard, please click the icon in the task bar.



7. LED and Beeper

CompuGuard provides status indicator through Two LEDs located at front panel as well as beeper. The indicators are shown below.

Status	Green LED	Red LED	Beeper
On line mode	On	Off	No Beep
On battery mode	Flashing every 10 sec	Off	2 beeps every 30 sec
Low battery condition	Flashing every 1 sec	Off	Beeps every 1 sec
Overload condition during battery mode	Off	On	Continuous Beep
Thermal protection	Off	Flashing every 1 sec	No Beep
Internal Fault	Off	On	Continuous Beep

8. Trouble Shooting

Please check PowerShield FAQ web page or contact technical support for an assistance with the problem that cannot be resolved using the trouble shoot table below.

Problem	Possible causes	Solution
No LED lit on the front panel	Low Battery	Recharge the battery for 8 hours.
	Battery maybe fault	Call PowerShield for service.
	Unit not turned on	Press on/off button to turn the unit on.
Battery backup time is too short	The UPS maybe overloaded	Remove some peripherals from the UPS outlets.
	Battery capacity maybe low	Recharge the battery for at least 8 hours.
	Battery maybe bad	Call PowerShield for service.
Unit beeps continuously and Red LED turns on	Unit maybe overloaded	Reduce some peripherals from the UPS outlets.
	Internal fault	Call PowerShield for service.
Unit beeps every 30 secs	Unit is in battery mode	This is normal operation.
Beeps every 2 secs	Internal fault	Call PowerShield for service.

9. Storage and Maintenance

Storage : Before storage, please recharge the unit for 8 hours and store in a cool and dry condition. During storage, recharge the battery in accordance with the following table :

Storage temperature	Recharging frequencies	Charging time
-25°C to 40°C	Every 3 months	4 to 6 hours
40C °C 45°C	Every 2 months	4 to 6 hours

Maintenance : This unit has no user serviceable parts. If the battery service life (3 to 5 years at 25C ambient temperature) has been exceeded, the battery must be replaced. Please call PowerShield technical support for detail.

10. Warranty and Service.

Warranty Condition

The standard warranty is TWO (2) years from the date of purchase. The standard PowerShield procedure is to replace the original unit with a factory refurbished unit. PowerShield will ship the replacement unit once the defective unit has been received by the service department, or cross ship upon the receipt of a valid credit card number. The customer pays for shipping the defective unit to PowerShield. PowerShield pays ground freight transportation costs to ship the replacement to the customer within Australian capital cities metro areas only.

WARRANTY SERVICE PROCESS :

1. Review the problems discussed in the troubleshoot section of this manual to eliminate common problems.
2. Verify that no input/output circuit breaker is tripped. A tripped circuit breaker is the most common problem.
3. If the problem still persists, please call **1300-305-393** for technical support or fill in the form in PowerShield web page for on line technical support.

Following details are needed for warranty claims.

- Model number
 - Serial number
 - The date of purchase
4. Be prepared to troubleshoot the problem over the phone with PowerShield technical support.
 5. If technical support finds that the product is defective, then the technical support will issue a Return Material Authorization Number (RMA #)
 6. If the unit is under warranty, repair is free. If not there is a repair charge.
 7. Pack the unit in its original packaging. Pack properly to avoid damage during transit. Damage sustained in transit is not covered under warranty.
 8. Mark the RMA # on the outside of the package.
 9. Return the defective unit by insured, prepaid carrier to the address given to you by Technical support.

11. Product Specification

CompuGuard	
Model #	PSCG650
Capacity	650VA/390W
INPUT	
Voltage	240Vac (Nominal)
Acceptable input voltage	180 – 270Vac
Frequency	50/60Hz (Auto Sensing)
OUTPUT	
Output Voltage (Batt mode)	240Vac ± 10%
Frequency	50/60Hz ± 1Hz
Transfer time	2~6 ms (Typical)
Waveform (Batt mode)	Simulated sinewave
Outlets – UPS protection	2
Outlet – Surge protection	1
BATTERY	
Battery Type	12V/9Ah
Backup time (1 PC @ 100W)	Approx 25 min
Recharge Time (Typical)	8 hours to 90% capacity.
PROTECTION	
Surge	156 Joules / 4500A
Safety	EN62040-1-1 2003, IEC60950-1 2001
EMC	EN62040-2 2006
COMMUNICATION	
USB Interface	PowerShield NetGuard supports Windows™, Linux, Unix, and Mac
PHYSICAL	
Dimension D x W x H	232 x 83 x 200 (mm)
Net Weight	3.6Kg
OPERATING ENVIRONMENT	
Temperature	0 to 40°C
Humidity	0 to 90% (Non Condensing)