# Powerware 3105 UPS User's manual



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# Powerware 3105 UPS User's manual

1023921 Revision B

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# Introduction

The Powerware 3105 uninterruptible power system (UPS) filters the input line from line disturbances and protects your sensitive electronic equipment from three common power problems such as power failures, power sags and power surges.

### Features:

- Six outlets
  - Three with surge and battery backup protection
  - Three with surge protection only
- Data Line (Internet fax-modem-DSL) or telephone line surge protection jacks
- Cold Start capability
- Proprietary LanSafe Power management software
- User-replaceable batteries
- Built-in USB communication port
- Compact design fits on/under your desk; can also be mounted to a wall

## Unit inspection

Once you have received the Powerware 3105 UPS product, you should remove and inspect the product for shipping damage. If any damage is found, please notify the carrier and your dealer. Please keep the shipping carton and the packing foam in the event the product must be returned to the factory for service.

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# Safety Instructions



## **ATTENTION**

Maintenance, other than battery replacement must be performed by a qualified technician. Failure to do so could result in an electrical shock. Although the unit may be unplugged from utility power, hazardous voltage still may be present through the battery.

- 1. Place the Powerware 3105 UPS indoors in an area that has adequate airflow and is free of excessive dust. Do NOT allow the UPS to be exposed to moisture, rain, excessive heat, or direct sunlight.
- 2. Use of the Powerware 3105 UPS product in life support applications, where failure of this equipment can reasonably be expected to cause failure of life support equipment or to significantly affect its safety or effectiveness is NOT recommended.
- 3. Shut off the UPS and disconnect the input power cord from the wall outlet before replacing the battery.
- 4. When replacing the battery, use the same number and type of battery
- 5. Do NOT dispose of battery in a fire. The battery may explode.
- 6. Do NOT open or mutilate the battery. They contain an electrolyte that is toxic and harmful to the skin and eyes.
- 7. Proper disposal of the battery is required. Please refer to your local laws/regulations regarding battery disposal.
- 8. Use tools with insulated handles to replace the battery to avoid personal injury. Due to energy hazard, please remove wristwatches and jewelry such as rings when replacing battery.

# Battery connection required before use!

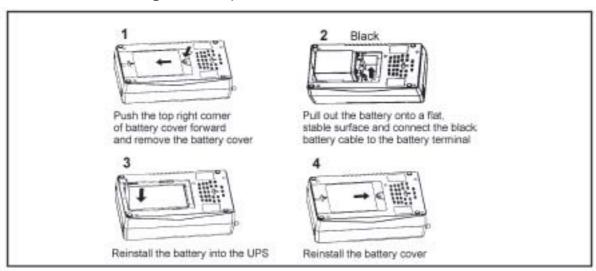
# Connecting the Battery:

Principle shown below. For detailed information how to connect, please refer to battery replacement section.

## Installation and Operation:

The following steps explain how to connect and operate the Powerware 3105 UPS.

1. Connect the UPS to a grounded power outlet.



#### Note

It is recommended that the battery should be charged for minimum 8 hours to ensure full charge before placing the UPS in service.

2. Plug your computer, monitor or load to be protected into the "Battery Backup & Surge Protection" outlets. (These outlets will provide emergency battery backup power during power outages as well as protection from surges and spikes.)

Do NOT plug LASER PRINTERS into the "Battery Backup" outlets.

Do NOT plug ACCESSORY SURGE strips into the "Battery Backup" outlets.

- 3. Plug your peripheral equipment or non-critical loads (printer, scanner, fax, speaker, etc.) into the "Surge Protection" outlets. (These outlets provide surge and spike protection only, they will NOT provide battery backup power during a utility power failure).
- 4. Connect your computer to the UPS using USB cable provided.
- 5. With your equipment turned off, switch on the UPS.
- 6. When the "On/Off" LED light is illuminated, turn on the connected equipment.
- 7. Install Power management software provided with the UPS

#### Indicators



#### 1. On/Off Push Button/Test Switch

One switch controls the power to your equipment. Upon power turn on, unit performs a self-test to detect overload or undercharged conditions.

#### Turn on the UPS

Press and hold the push button switch depressed for more than one second. Release the switch after the audible beep is sounded.

#### Turn off the UPS

Press and hold the push button switch for more than one second and release the switch after the audible beep is sounded. The UPS will shut down.

#### **Self-Test**

The UPS performs a self-test for about 3 seconds when the UPS is turned on.

#### 2. On/Off Battery LED

Indicates the UPS is on and is powering your equipment.

A constantly illuminated LED indicates normal utility power operation.

A blinking LED indicates that the UPS is providing power from its battery.

#### 3. Fault/Warning LED

Indicates a fault or warning condition is present.

A constantly illuminated LED indicates a LOW battery condition.

A blinking LED indicates the UPS is overloaded.

#### 4. Battery Backup & Surge Protection Outlets

(3) Australian 10 Amp output receptacles that provide both battery backup and surge protection.

#### 5. Surge Protection Outlets

3) Australian 10 Amp output receptacles that provide surge and spike protection.





#### 6. RJ11 Phone/Fax Protection Connectors

#### 7. USB Communication Port

The provided LanSafe monitoring and shutdown software can be automatically configured to save your files and shut down your computer in the event of a prolonged power outage.

Your personal computer can receive the status as utility power line, utility power failure, on battery and low battery by contact closure signals that are sent through the USB port.

#### 8. Circuit Breaker (resetable)

The button protrudes out when an overload condition occurs. If the button protrudes out, then disconnect some non-essential equipment and reset the circuit breaker by pushing the button inward.

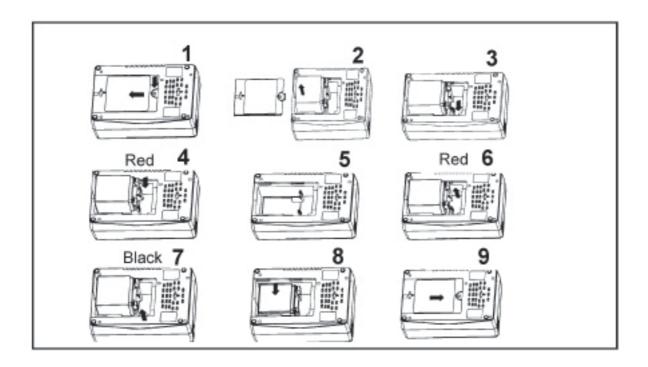
#### 9. Power connector

10 Amp IEC to 10 Amp Australian input lead provided.

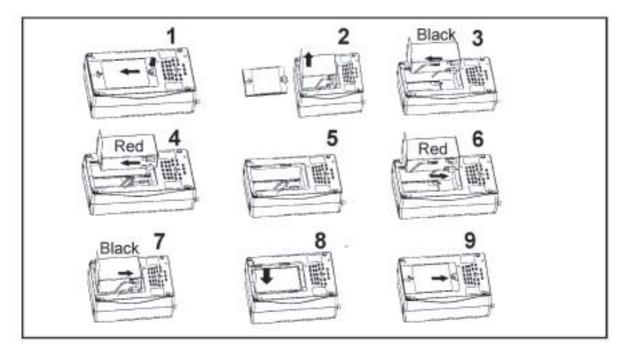
# Battery Replacement procedure:

- 1. Batteries must be replaced with identical type.
- 2. Disconnect UPS system from power source
- 3. Open battery door.
- 4. Disconnect used battery. Connect new battery. (It is important that connectors be firmly attached to new batteries.
- 5. Close battery door.
- 6. Properly recycle used battery.

350VA and 500VA models (12V-4.5Ah, or 5Ah battery)



700VA model (12V- 7Ah battery)



# Status Indicators

The UPS provides both visual and audible status indicators. Visual indicators consist of three LEDs to represent the following conditions:

- On utility power operation
- On battery power operation
- UPS fault/alarm

# LED & Alarm Status Table

UPS status		Green LED	Red LED	Buzzer
Self test		Blink 1 (by turns)		B1
AC (Utility mode	Charging	ON	OFF	OFF
	Charge off	ON	OFF	OFF
	Low battery	ON	Blink 2	B5
	Over load	ON	Blink 2	B4
DC (Battery Mode)	Normal	Blink 2	OFF	B1
	Over load	Blink 2	OFF	B1
	Low battery	Blink 2	Blink 2	В3
Short/Fault/DC Over-Bat		OFF	ON	ON
AC Over-Bat/Bat Fault		OFF	Blink 2	B5

#### Notes:

Blink 1: ON 0.5 seconds / OFF 0.5 seconds Blink 2: ON 0.25 seconds / OFF 0.25 seconds

B1: 1 beep / 5 seconds ON 0.25 seconds / OFF 4.75 seconds

B3: 2 beeps / 5 seconds ON, 0.25 seconds / OFF 0.25 seconds 2 times 4 seconds OFF

B4: ON 0.5 seconds / OFF 0.5 seconds

B5: 3 beeps / 5 seconds ON 0.25 seconds / OFF 0.25 seconds 3 times 3.5 seconds OFF

# Specification\*:

D. C.				
Rating	350VA	500VA	700VA	
Part Number	31050350A	31050500A	31050700A	
Capacity	350VA/210W	500VA/300W	700VA/420W	
Dimensions (mm) HxWxD	180x280x115	180x280x115	180x280x115	
Unit Weight (kg)	4.5	5	6.5	
Input Connection	1.8 metre line cord IEC to Australian 10Amp Plug			
Output Connection	6 Australian 10Amp Outlets (3 Battery Backup & Surge Protection, 3 Surge Protection only)			
Operation				
Input Voltage Range	0-300 VAC			
Output Voltage Range	Nominal -18% to +10%			
On Battery Output Voltage	Nominal -12% to +10%			
Frequency	50 Hz			
Lightning/Surge Protection	476 joules			
Safety	AS/NZS62040.1.1, AS/NZS60950, A-Tick			
EMI	AS/NZS62040.2, AS/NZSCISPR22, C-Tick			
Transfer Time to Battery/AC	2-6 msec. typical			
Battery Type	Sealed, maintenance free lead-acid battery			
Typical Backup Time	3 minutes at full rated load			
Internet/Phone/Fax Protection	RJ11			
Short Circuit Protection	Circuit Breaker			
Communication Port	USB			
Environmental				
Operation Temperature	0°C - 40°C			
Operation Relative Humidity	0 to 95% non condensing			
Storage Temperature	-15°C - 50°C			
Software	Powerware LanSafe Software is included free of charge			
Service Plans	Optional Extended Warranty and On Site Changeover service plans available			

<sup>\*</sup>Due to continuing product improvement programs, specifications subject to change without notice

# Troubleshooting

Symptom	Possible Cause	Action to Take	
LIDO - III	The battery is disconnected and utility power is not available at the wall outlet.	Connect the battery (see Connect Battery) and ensure power is available at the wall outlet.	
UPS will not turn on	Input Circuit Breaker has tripped.	Reduce the amount of equipment plugged into the outlets of the UPS. Next, reset the circuit breaker by pushing the plunger back in.	
UPS is making a continuous sound and the "Overload" indicator is lighted.	The "Battery Backup & Surge Protection" outlets are overloaded.	Turn off the UPS and reduce the amount of equipment connected to these outlets.	
UPS does not provide expected runtime.	The battery is not fully charged.	Removed all connected equipment from the UPS and charge the battery at least 8 hours. During this charging period, turn off the UPS to prevent unnecessary discharging.	
	Battery is getting older.	Call for service or you can replace the battery by ordering one from your dealer.	
Connected equipment loses power while connected to the UPS	The UPS is overloaded.	Reduce the amount of equipment plugged into the outlets of the UPS. Try reducing the load by removing one piece of equipment at a time to determine if the problem continues.	
	The UPS has exhausted its available run time.	The UPS will turn off when the battery has been depleted during an extended power outage. Allow the UPS to re-charge the battery, before continuing on battery operation.	
	Equipment is connected to the "Surge Protection" outlets.	Ensure the equipment that is to be protected from a power outage is plugged into the "Battery Backup & Surge Protection" outlets.	
	The UPS may require service.	Contact Powerware Technical Support	

# Service and Support

For questions and/or problems, please call your local distributor or the help desk and ask for a UPS technical representative.

## Powerware National Service Centre

1300 303 059

Please have the following information ready

- Model number and Serial number
- Symptoms of failure or problem
- Customer contact information

For additional information please visit us online: www.powerware.com.au



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