

# W&C WELLING & CROSSLEY

## Portable Power Station Owner's Manual WC-BG600 • 811993



SILENT  
OPERATION



LiFePO4  
TECHNOLOGY



WIRELESS  
CHARGING



FAST  
CHARGING



UPS



## 1. Product Introduction

Congratulations for purchasing a Welling & Crossley WC-BG600 Portable Power Station.

The WC-BG600 is a lightweight, easy-to-carry power station with a 600W rated output (1200W surge) and 512Wh capacity.

Built for convenient power on the go, it's perfect for charging tool batteries, running small appliances, or keeping essential devices powered wherever you are.

With advanced LiFePO<sub>4</sub> battery technology for extra safety and a long life, it's a great go-anywhere solution for silent, reliable power.

## 2. Disclaimer

Please read this manual before using your portable power station. It's important to understand how to use the product safely and as intended. Incorrect use may lead to injury, damage to the product, or property loss. By using this product, you agree that you understand and accept the information provided in this manual.

You're responsible for using the product in line with local laws and safety guidelines. The supplier is not liable for any issues caused by improper use or unauthorised modifications.

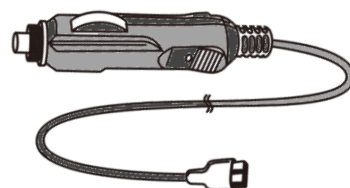
For the latest updates and support information, please visit our website. If you have any questions, contact our customer support team at [www.whiteint.com.au](http://www.whiteint.com.au) or [www.whiteint.co.nz](http://www.whiteint.co.nz).

## 3. What's in the Box

WC-BG600 Portable Power Station



AC Charge Cable:  
3 pin male plug to IEC C13  
appliance inlet







DC Car Charger Cable:  
Car accessory plug to Anderson  
type connector

## 4. Contents





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## 5. Important Icons

These icons will be used throughout the manual to draw attention to sections where there is risk of harm or which we feel are important to understand clearly

	<b>Warning</b> - Electrical safety.
	<b>Danger</b> – Potential consequences of use outside of intended application(s). Includes environmental condition warnings.
	<b>Warning / Caution</b> - Indicates a hazardous situation which, if not strictly complied with, may result in property damage.
	<b>Read carefully.</b> This important information will simplify operation and aid understanding.

## 6. Warnings

   	Read the manual carefully before starting. DO NOT operate this unit until you have read ALL safety, operation, and maintenance instructions.
	The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product but must be supplied by the operator.
	Failure to follow the instructions may result in property damage, INJURY or DEATH.
	This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

## 7. Cleaning and Storage

Care must be taken not to get the WC-BG600 wet. To clean, gently wipe with a dry, soft, clean cloth or paper towel.

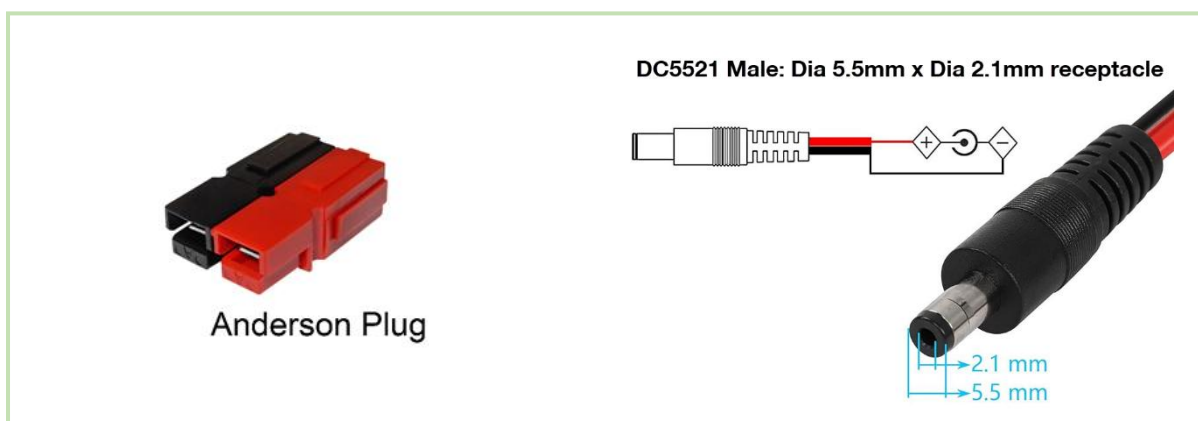
Before storage, close all outlet covers and place in a dry, ventilated place at room temperature.



**Never place it near a water source or where there is a risk of getting wet.**

During long-term storage, every three months discharge the battery to 30% then recharge to 60%. This will prolong the service life of the battery.

Failing to maintain the battery in this manner voids the product warranty.



## 8. Product Specifications

<b>Power Station</b>	<b>WC-BG600</b>
Product Code	811993
<b>Battery</b>	
Capacity	512Wh
Max AC Output	1200W
Rated AC Output	600W
Cell Chemistry	LiFePO4
Cycle Life (to 80%)	3000+ cycles
<b>Ports</b>	
AC Input (x1)	230V, 50Hz, 200W Max
AC Output (x1)	230V, 50Hz, 15A, 600W (Surge 1200W)
DC Solar Input (x1)	18-25V DC, 200W Max (MPPT Supported, 10A Max)
DC5521 Output (x2)	12V/10A Total Max
DC Car Charger Output (x1)	12V/10A Anderson Type
USB-A Output (x2)	24W Max (5V/2.5A, 9V/2A, 12V/2A)
USB-C Input/Output (x1)	100W Max (5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/5A)
Wireless Charging (x1)	Up to 15W (5W, 7.5W, 10W, 15W)
LED Lighting Output	Adjustable brightness and SOS/Flash modes
<b>Dimensions &amp; Performance</b>	
Product Dimensions	228 x 165 x 170mm
Net Weight	4.5kg
Operating Temperature	-10 - 40° C
Charging Temperature	0 - 40° C
Charging Time (to 80%)	60 min
Protection Features	High temperature, low temperature, overcharge, over-discharge, overload, short circuit, and overcurrent protection

## 9. Safety Instructions

Please take a moment to read these guidelines. They're here to help you use your power station safely and avoid damage to the unit or your property.



### General Safety

- Keep the unit away from heat sources, open flames, and direct sunlight.
- Do not use the product in wet or humid environments.
- Do not expose the unit to rain, moisture, or submerge it in water.
- Place the unit on a stable, flat surface during use.

### Electrical Safety

- Only use approved charging cables and accessories.
- Do not use the product if the casing or cable is damaged.
- Avoid using near strong static electricity or magnetic fields.
- Never attempt to disassemble or modify the unit.
- Do not insert foreign objects into any inlet / outlet ports.



### Battery Safety

- This unit contains lithium batteries. Do not pierce, crush, or expose to impact.
- If dropped or damaged, stop using it immediately and contact support.
- Avoid extreme temperatures and direct sunlight. High heat (>40 deg C) may cause fire. Low temperatures (< 3 deg C) may affect performance.
- Do not cover the fan or block airflow during use.

### Transport & Storage

- Keep the unit secure during transport to avoid vibration or impact.
- For long-term storage:
  - Discharge to ~30%, then recharge to ~60% every 3 months
  - Store in a dry, ventilated space at room temperature
- Keep out of reach of children and away from pets.

### Disposal

- **Do not dispose of the unit in general waste.**
- If possible, fully discharge the battery before recycling.
- Use a certified battery recycling service, especially if the unit can't be charged or is damaged.

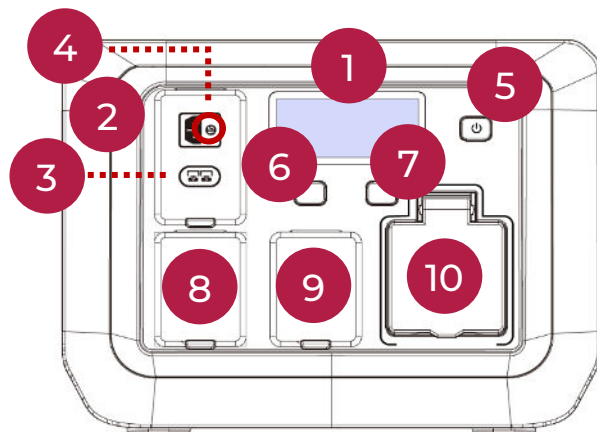


### In Case of Emergency

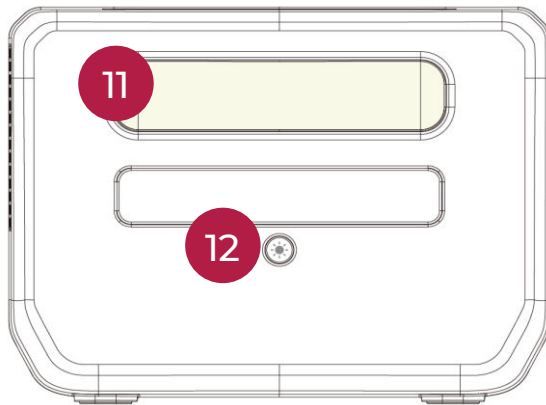
- If the unit gets wet, move it to an open space and keep away until fully dry. Do not reuse it.
- If it catches fire, deploy (in this order): water or water mist, sand, fire blanket, dry powder fire extinguisher then CO<sub>2</sub> fire extinguisher.



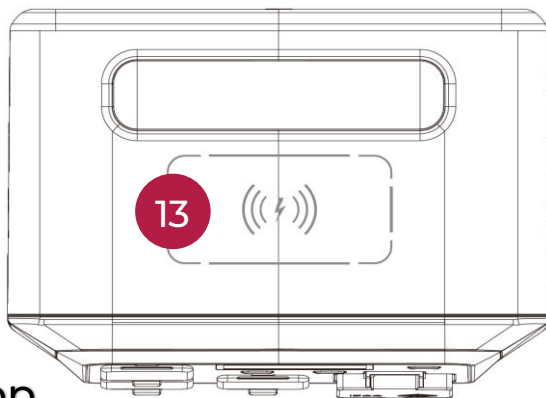
## 10. Product layout



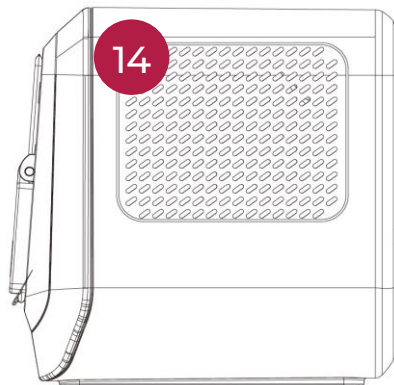
Front



Back



Top

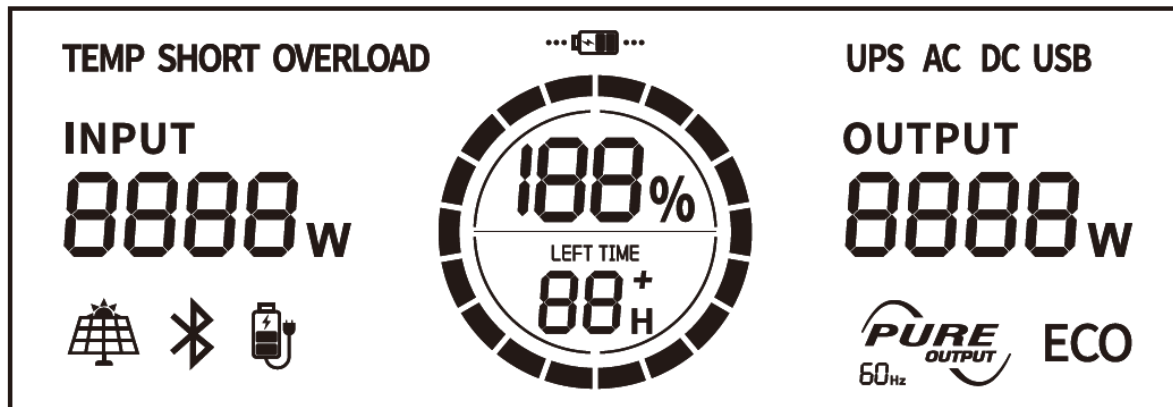


Side

- 1 **LCD display**  
Displays power and battery info.
- 2 **AC Recharging Input (IEC C14)**  
Insert the power cord connector into this port then connect to mains
- 3 **Car / Solar DC Input (Anderson)**  
Supports 2 x 100W panels in parallel:  
Max 18 – 25V, 200W  
Car input: Max 100W
- 4 **Overload protector (AC input)**  
Resets the AC input if charging current exceeds 15A. Press to reset.
- 5 **Power Switch**
  - Click the power button to turn the unit on, Turns on the USB output port(s) and top wireless charging.
  - Double click to enter ECO mode
  - Long press to turn off
- 6 **DC Output switch**  
This button activates the auto charge input and the 2 x DC outputs
- 7 **AC Output switch**  
Controls the AC Outputs.  
*Turn off when not in use*
- 8 **Car output**  
DC 5512 Output  
**OUTPUT ONLY – NEVER FOR INPUT**
- 9 **USB-C 100W output**  
Fast charge output
- 10 **230VAC Output**  
Single 230V~50Hz socket to power appliances and devices accepting 230VAC up to a maximum of 600W output power
- 11 **LED light**  
Press repeatedly to cycle through lighting modes: 25%, 50%, 100%, SOS, and Flash.
- 12 **LED light button**  
Press 1 sec apart to cycle lighting modes
- 13 **Wireless Charging**  
Supports 15W wireless charging
- 14 **Cooling fan**  
Activates automatically to regulate internal temperature during operation or charging.



## 11. Smart LCD Screen



### Input Power

Displays the input current to the unit in real time

### Battery Indicator

Display the remaining battery charge. The icon rotates when charging and discharging

### Battery Charge Percentage

Displays the percentage of battery remaining. When less than 5% charge remains recharge the unit

### Output Power

Displays the output current from the unit in watts.

### Remaining Charge / Discharge Time

The remaining charging/discharging time is calculated based on the current power consumption of the unit.

### DC Charging – Solar / Car Accessory

When the unit is receiving a DC input from Solar or Car charge this icon illuminates

### Bluetooth

When a mobile app controls the product, the Bluetooth icon will light up (N/A at this time)

### AC Recharging Input

When the product is connected to mains charging, this icon will light up.

### Pure Sine Wave

When the product is connected to mains charging, (V AC) this icon will light up.

### TEMP / SHORT / OVERLOAD

When the unit has activated a protection mechanism, the corresponding icon will illuminate

### UPS Icon

When bypassing input and output, the UPS icon will light up. (uninterrupted power supply)

### AC Output

When AC output is active, the AC icon will light up.

### USB Output Icon

When the USB output port is in use, the USB output icon appears on the screen

### DC Output

When the DC output port is in use, the DC output icon appears on the screen.

### ECO Mode

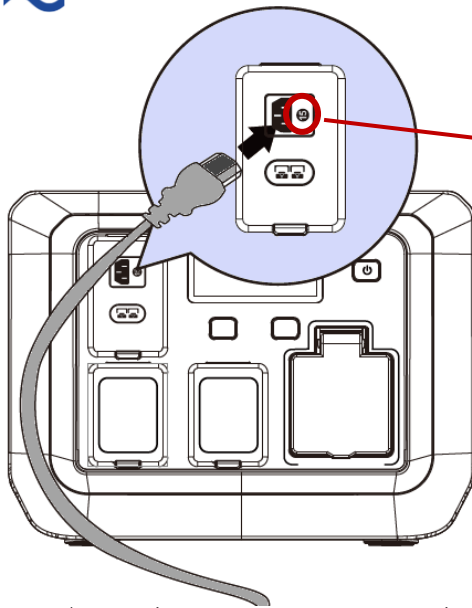
After double-clicking the power button to enter energy-saving mode, the ECO icon will light up.

### Frequency Display Icon

The icon will display and indicated the AC input frequency (50/60Hz)



## 12. Recharging - AC



Recharge time to 80% approx. 60min.  
Full recharge to 100% approx. 80 min.

If the AC input current is continuously greater than 15A, the AC input port thermal protector will activate to protect the unit.

The overload button will pop up automatically.

Press the AC input overload protector to resume charging after confirming that the product has no fault

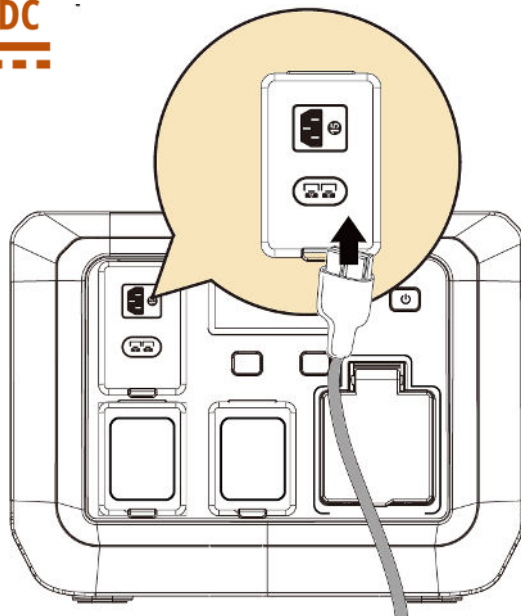
The battery indicator rotates during charging



Fully charged, all segments illuminate and remain solid



## 13. Recharging – DC from PV Solar panels



Recharge time dependent on array size and available solar energy.

Solar panels are optional accessories.

Charging time is determined by the light intensity and light area.

Ensure that the output from the panels does not exceed the maximum DC input power

18V to 25V 10 Amp max

The battery indicator rotates during charging




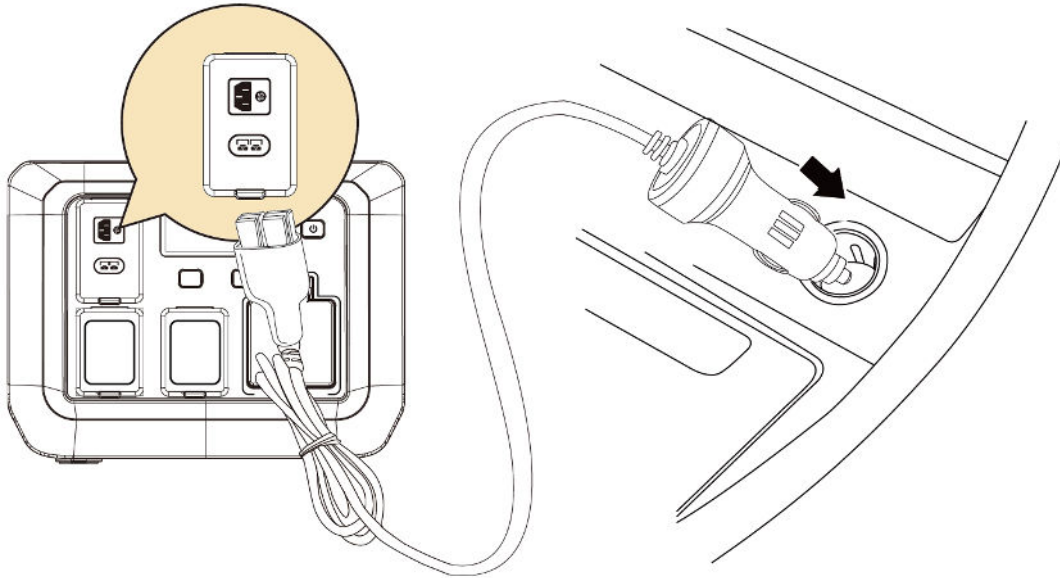
Fully charged, all segments illuminate and remain solid



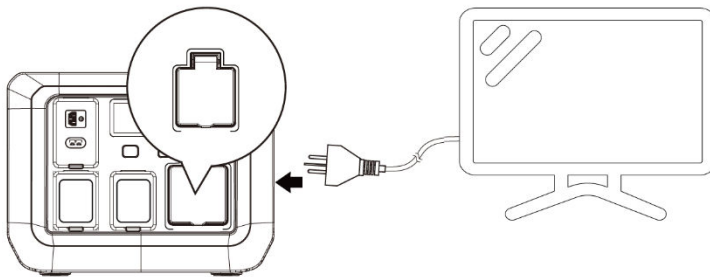
To maximise long term battery health, maintaining lithium-ion batteries between 30% and 70% of their full charge is widely recognised as a 'best practice'

## 14. Recharging – DC using the car charging cable

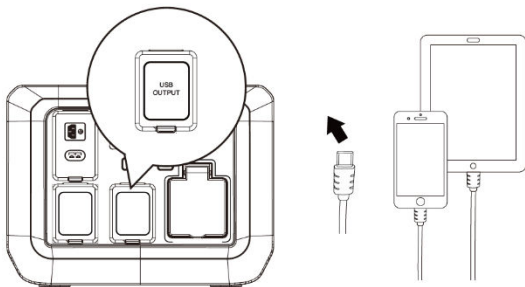
1. Insert the car charging cable Anderson connector into the charging inlet **DC**
2. Insert the car appliance connector into the vehicle accessory outlet 



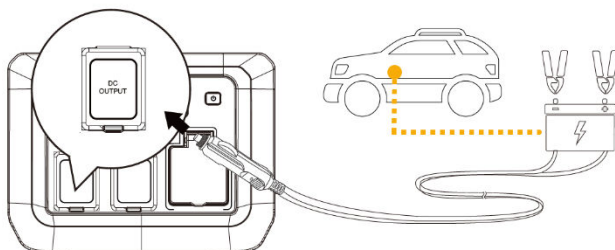
## 15. How to Use



The BG600 can power devices up to 600W  
**MAXIMUM** output



It can charge multiple devices at the same time. The USB-C outlet is rated up to 100W and supports FAST CHARGING



The BG600 can be used to charge a car battery

## 16. UPS – Uninterrupted Power Supply

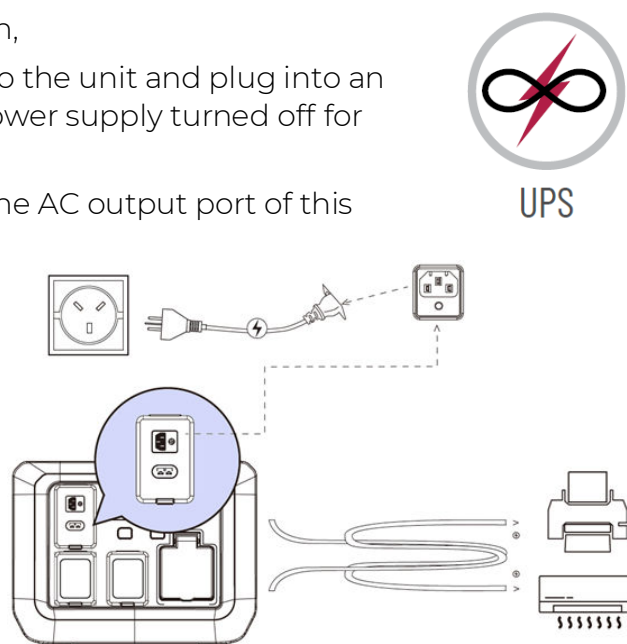
The W&C BG600 supports UPS function,

Connect the AC charging power cord to the unit and plug into an AC power socket. Leave the external power supply turned off for now

Connect the electrical appliance(s) to the AC output port of this product.

To initiate UPS function: switch on the unit's AC output and make sure the UPS function icon is lit. Then, switch off the machine to enter the UPS switching function.

The electrical appliances can use the AC output port of this product to work (at this time, the AC power comes from the Mains electricity, not the station supply).



When the Mains electricity is suddenly cut off, this product will automatically switch to the station supply mode within 25ms.

Under normal conditions, when the product is fully charged (charge level is shown as 100%), the mains power is supplied directly to the appliance(s).

## 17. Device run-time: WC-BG600

Battery life will vary depending on the surrounding temperature and number of recharge cycles.

Power Consumption	230VAC Device Expected operation (Approximate)
10W	46 hr
20W	23 hr
40W	11 hr 30 min
60W	7 hr 40 min
80W	5 hr 45 min
100W	4 hr 35 min
120W	3 hr 50 min
150W	3 hr 10 min
180W	2 hr 40 min
210W	2 hr 25 min
250W	2 hr
300W	1 hr 40 min
600W	50 min

Appliances and equipment with an electric motor can draw 3 to 5 times their running current whenever they start. This may cause the BG600 to trip its overload



Appliance	Running Watts
Air conditioning, evaporative	275W
Laptop	60 – 80W
Lights	25-200W
Radio	60W
Small refrigerator	200 – 500
Refrigerator	200-800
Television set	75-250W
Phone charger	15-25W

## 18. Warranties – Terms and Conditions

This warranty is given in addition to the consumer guarantees found within the Australian Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 NZ for goods purchased in New Zealand:



1) White International Pty Ltd / White International NZ Ltd (White International) warrant that all products distributed are free from defects in workmanship and materials, for their provided warranty period as indicated on the top or opposite side of this document. Subject to the conditions of the warranty, White International will repair any defective products free of charge at the premises of our authorised service agents throughout Australia and New Zealand if a defect in the product appears during the warranty period. If you believe that you have purchased a defective product and wish to make a claim under this warranty, contact us on our Sales Hotline on 1300 783 601, or send your claim to our postal address or fax line below and we will advise you as to how next to proceed. You will be required to supply a copy of your proof of purchase to make a claim under this warranty.

2) This warranty excludes transportation costs to and from White International or its appointed service agents and excludes defects due to non-compliance with installation instructions, neglect or misuse, inadequate protection against the elements, low voltage or use or operation for purposes other than those for which they were designed. For further information regarding the suitability of your intended application contact us on our Sales Hotline on 1300 783 601. If you make an invalid claim under this warranty, the original product will be sent back to you unrepaid.

3) This warranty refers only to products sold after the 1st January 2012, and is not transferable to another product type and only applies to the original owner, purchaser or end user, and is in addition to the consumer guarantees found within the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand.

4) Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. 2 YEAR WARRANTY.

5) To the fullest extent permitted by law, White International excludes its liability for all other conditions or warranties which would or might otherwise be implied at law. To the fullest extent permitted by law, White International's liability under this warranty and any other conditions, guarantees or warranties at law that cannot be excluded, including those in the Competition and Consumer Act 2010 (Cth), is expressly limited to: (a) in the case of products, the replacement of the product or the supply of equivalent product, the payment of the cost of replacing the product or of acquiring an equivalent product or the repair of the product or payment of the cost of having the product repaired, is at the discretion of White International or a 3rd party tribunal elected under the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand; and

6) To the fullest extent permitted by law, this warranty supersedes all other warranties attached to the product or its packaging.

7) In the case of services, supplying the services again or the payment of the cost of having the services supplied again, is at the discretion of White International or a 3rd party tribunal elected under the Competition and Consumer Act 2010 (Cth) for goods purchased in Australia and the Consumer Guarantees Act 1993 (NZ) for goods purchased in New Zealand.

8) Our warranty commences from the date of purchase of the above mentioned product(s). Proof of purchase is required before consideration under warranty is given.

*Record your date of purchase in the space below and retain this copy for your records.*

Date of Purchase ..... Model Purchased .....





[www.whiteint.com.au](http://www.whiteint.com.au)

[www.whiteint.co.nz](http://www.whiteint.co.nz)

Please always refer to our website for further technical information & new product innovations

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