

## 600/1000/2000W POWER INVERTERS

Keep your devices charged and your appliances powered up during your outdoor travels with the Thunder 600/1000/2000W Pure Sine Wave Inverters. These intelligent devices convert the DC current from your vehicles battery into AC current giving you access to the same type of 240V power you get at home.

The Thunder inverters include overload, short circuit and over-temperature protection and load-controlled cooling fan, which is engaged when power consumption reaches a certain level preventing further damage to your battery.

Whether you are looking for a small inverter to run something from your car or camper trailer, or you want to power a range of appliances from your boat, the Thunder 600/1000/2000W inverters have got you covered.

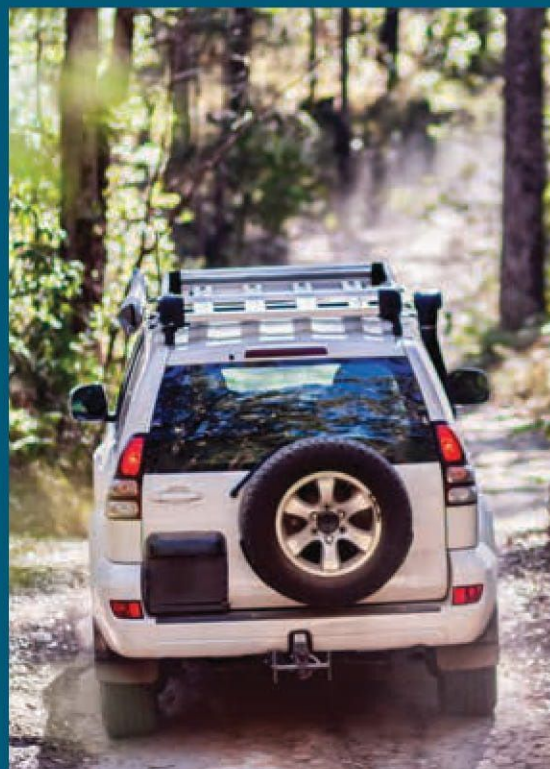
**THUNDER**  
*Connection to your Weekend Escape*



**600W**  
**TDR02600**

**1000W**  
**TDR021000**

**2000W**  
**TDR022000**



### FEATURES

Removable 2.4-inch Bluetooth colour LCD display with touch screen functionality for switching main unit on/off and displays inverter input voltage, amperage, output AC wattage and low voltage warning

Heavy duty aluminium housing

Highly efficient power processing with 90% efficiency

Permanent mounting points

Low voltage warning at 11.5V with flashing voltage reading on the voltage gauge

Shuts down output at 11V along with visible warning on LCD screen

Over/under voltage, output short circuit, over temperature protection

Automatic temperature reduction with rear cooling fan

3-year warranty

Single 240VAC outlet (600/1000W inverters only)

Dual 240VAC outlet (2000W inverter only)

Automatic AC transfer switch senses when 240VAC input connected (2000W inverter only)







## SPECIFICATIONS

	TDR02600	TDR021000	TDR022000
Continuous Output Power	600W	1000W	2000W
Peak Power (only for a short time)	1200W	2000W	4000W
Output Overload Protection (manual restart)	680W	1100W	2200W
Output Voltage	240V		
Efficiency (full load)	90%		
AC Transfer Switch	-	-	Yes
Transfer Switch Speed	-	-	≤0.5s
Safety Switch	5A250VAC		-
RCD Switch Protection	-	-	10A240VAC, t≤0.1s
Input Cable Type Supplied	70cm AWG8 (7.2mm <sup>2</sup> )	70cm AWG6 (13.3mm <sup>2</sup> )	70cm AWG3 (25mm <sup>2</sup> )
	100% copper fully insulated		
External Fuse Specification	50A	80A	150A
Measurements	263x233x95mm (80mm C2C Mount holes)	310x233x95mm (80mm C2C Mount holes)	435x233x95mm (80mm C2C Mount holes)
Minimum Input Voltage	11V		
Output Frequency	50Hz		
Output Waveform	Pure Sine Wave		
Input Voltage Range	11-15V		
Input Low Voltage Warning	11.5V		
Input Low Voltage Cut-off	11V		
Input Over-Voltage Cut-Off (automatically resets)	15.5V		
Standby Current (when main switch is off)	11mA		
No Load Working Current (when main switch is off)	0.5-0.6A		
Protection Systems (output)	Over/under-voltage protection, overheating protection, overload protection, output short circuit protection		
LCD Display Functions	Displays output power, input voltage, input current and also has an on/off button for switching unit on/off		
LCD Screen Extra Cable Length	0.3m and 1.7m extension cable for LCD display unit power supply		
Internal Operating Temperature Range	-10°C - 50°C		
Internal Over-Temperature Protection (requires manual reset)	60°C - 65°C		
Cooling Fan	Single brushless fan (automatic operation)		
Fan Control Method	Temperature maintained at 40°C±10°C		
Approvals	CE, EMC, AS/NZS 4763:2011		





## LCD SCREEN OPERATION

The Thunder 600/1000/2000W Power Inverters come with a 2.4-inch Bluetooth LCD display with touch screen functionality for switching the main unit on/off from up to 10m away from the inverter installation location.

While the device is in use, the LCD screen will show the inverters output power, input voltage, amperage, output wattage and also low voltage warning allowing you to have better visibility of your device's functionality. The inverter also features a small Bluetooth icon on the top of the screen which will be displayed if there is signal received from the main unit.

If the input battery voltage reaches 11.5V, the voltage display value will start to flash, the low voltage warning will occur and the output power will shut down in order to prevent further power draw from the battery.



## INTEGRATED BLUETOOTH LCD DISPLAY SCREEN

1. 240VAC external power input  
(only displayed when external 240VAC power is connected)  
*\*Displayed on the 2000W Thunder Power Inverter only*
2. Bluetooth active icon  
(only displayed when the Bluetooth signal is connected)
3. Output active icon (When inverter has 240VAC load connected)
4. DC input active icon (When DC input terminal has 12V connected)
5. Input battery DC voltage reading  
(When battery voltage drops to 11.5V, the number will flash)
6. Output power reading
7. Low voltage cut-off indicator  
(only displays when battery voltage drops to 11V)
8. Input DC current reading
9. Touch control On/Off switch of the inverter output  
(Blue is on, Grey is off)
10. Manual switch to turn screen on/off



## 2000W POWER INVERTER AC TRANSFER SWITCH

The Thunder 2000W Pure Sine Wave Inverter is conveniently designed with the addition of an automatic transfer switch to allow a seamless transition from DC input to 240V mains power and vice versa.

This allows you the flexibility of using DC power when on the road, staying off the grid or utilising 240V power while staying at powered sites without having to manually switch between input modes. The switch does this by sensing when AC power is going into the back of the unit's AC terminals. The DC input will be bypassed and cut off to ensure no current draw from the DC battery. This then prompts the 240V AC outlets at the front and the three AC terminals at the back to become operational.

When using DC input, only the two front power points become active. This process happens in 0.1 seconds to ensure there is no disruption to powering the essentials in your caravan or motorhome. The 2.4-inch LCD screen displays the AC input mode on the top left corner and will display an input of 0V, 0A and 0W to allow complete visibility of the unit.

