

USER GUIDE

PS1800 PRO

PORTABLE POWER STATION



iTECHWORLD
THE POWER EXPERT

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OVERVIEW

The iTechworld PS1800 PRO Portable Power Station is an all-in-one power solution built to keep your world running, whether you're setting up camp, working remotely, or preparing for an unexpected power outage. It delivers clean, stable power wherever the grid can't reach, with no complex wiring or messy installs.

The PS1800 PRO is built around an 1800W pure sine wave inverter and a 1536Wh LiFePO4 battery, with the option to expand capacity up to 4608Wh using two EB1536 expansion batteries (sold separately). An informative LCD display, together with built-in Bluetooth monitoring and control, keeps you across charge levels and lets you adjust settings from your device.

From fridges and coffee machines to laptops and phones, the PS1800 PRO handles it all with consistent, reliable performance. Advanced safety features are built in as standard, so you can focus on the adventure or the job, not the power supply.

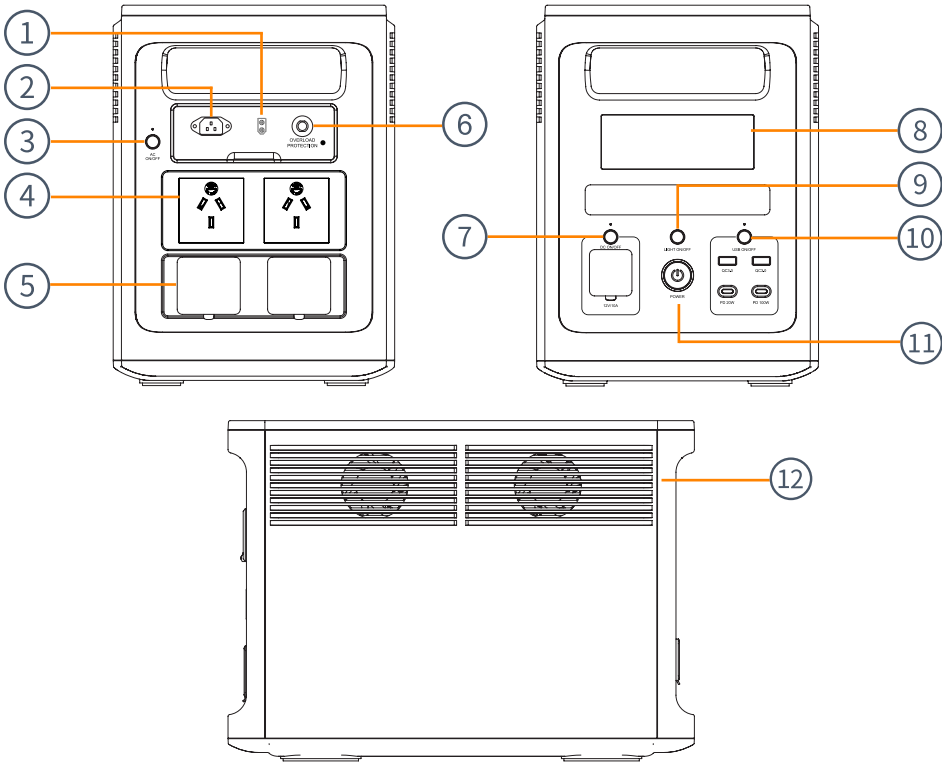
KEY FEATURES

- 1800W Pure Sine Wave output
- 1536Wh LiFePO4 battery, expandable to 4608Wh with EB1536 batteries
- AC, solar and car charging
- Built-in pass-through charging
- 10ms Uninterruptible Power Supply(UPS) mode
- Fast AC charging, 0-100% in 1 hour
- Bluetooth monitoring and control via the iTechworld Connect app
- Intuitive LCD display
- Multiple USB, USB-C, DC and AC outputs
- Built-in overload and short-circuit protection
- Plug and play setup

PACKAGE CONTENTS

				
PS1800 PRO Power Station	XT60 to 50A Anderson Adapter	AC Input Cable	XT60 to Cigarette Plug	User Guide

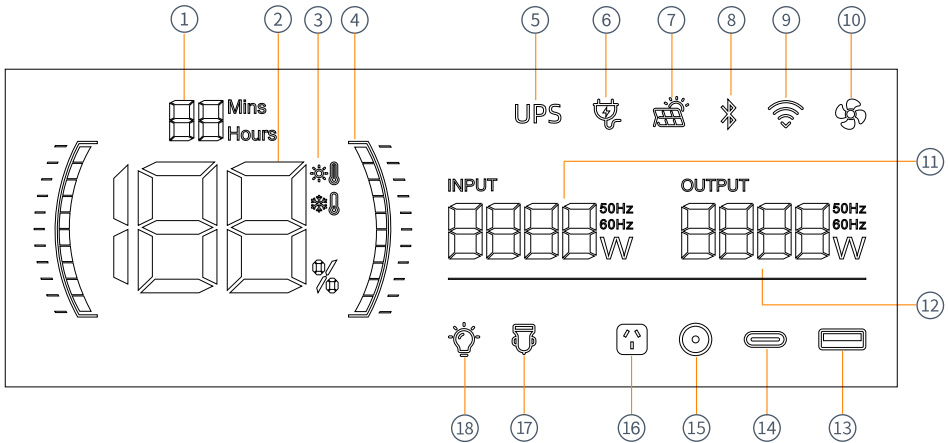
UNIT DIAGRAM



- | | |
|----------------------------|-----------------------------|
| ① XT60 INPUT PORT | ⑦ DC CONTROL BUTTON |
| ② AC INPUT PORT | ⑧ LCD DISPLAY |
| ③ AC OUTPUT CONTROL BUTTON | ⑨ LED CONTROL BUTTON |
| ④ AC 240V OUTPUT CONTROL | ⑩ USB CONTROL BUTTON |
| ⑤ PARALLEL PORTS | ⑪ MAIN POWER CONTROL BUTTON |
| ⑥ OVERLOAD PROTECTION | ⑫ AIR INTAKE / OUTLET |

LCD DISPLAY

The LCD display shows remaining battery level and real time usage data at a glance. It will enter sleep mode after 30 seconds of inactivity, waking automatically when power is detected or any button is pressed. The display stays active whenever the unit is charging or discharging.



- | | |
|----------------------------|---------------------------|
| ① REMAINING DISCHARGE TIME | ⑩ FAN STATUS |
| ② REMAINING CAPACITY | ⑪ TOTAL INPUT POWER |
| ③ TEMPERATURE STATUS | ⑫ TOTAL OUTPUT POWER |
| ④ BATTERY CHARGE STATUS | ⑬ USB OUTPUT STATUS |
| ⑤ UPS STATUS | ⑭ USB-C OUTPUT STATUS |
| ⑥ AC CHARGING STATUS | ⑮ DC OUTPUT STATUS |
| ⑦ XT60 INPUT STATUS | ⑯ AC OUTPUT STATUS |
| ⑧ BLUETOOTH STATUS | ⑰ CIGARETTE SOCKET STATUS |
| ⑨ WIFI STATUS | ⑱ LED LIGHT STATUS |

OPTIONAL ACCESSORIES



PS1800 PRO
Protective Cover



EB1536 Expansion
Battery



PS1800 PRO
Tray



XT60 to Anderson
Cable 25A



Power Station
Fast Charger



Anderson Wiring
Kit 60A 6AWG

OPERATION

BUTTON FUNCTIONS

The PS1800 PRO is simple to operate, with dedicated buttons for each output so you have full control at all times.

Power Control: Hold to turn the unit on or off (hold the button until the screen turns on/off). When not in use, please turn the unit off.

USB Control: Press to turn the USB outputs on or off. Ensure the unit is powered on first.

Light Control: Press to cycle through solid, SOS and flash modes. Hold to turn the light off.

DC Control: Press to turn the DC (cigarette) output on or off. Ensure the unit is powered on first.

AC Control: Press to turn the AC 240V outputs on or off.

To switch between 50Hz and 60Hz:

1. Press and hold the AC Control button for 3 seconds until the frequency icon begins flashing on the display.
2. Press the AC Control button again to toggle between 50Hz and 60Hz. Once the icon stops flashing, the switch is complete.

NOTE: 50Hz is standard in Australia. Only change this setting if required by your device.

Overload Protection: If the connected load exceeds the unit's rated output, the AC line will disconnect automatically. To restore it:

1. Turn the unit off and unplug all connected devices.
2. Confirm that all connected ports are in their standard, normal state.
3. Turn the unit back on, then press the overload protection button to restore the AC 240V output.

AC OUTPUT

Interface	Rated Power	Inverter Type	Frequency
2 x 15A Type I	1800W	Pure Sine Wave	50Hz / 60Hz

DC OUTPUT

Interface	Rating
Cigarette Socket	12V / 10A

USB OUTPUT

Interface	Rating
2 x USB QC3.0	2 x 18W
1 x USB-C	20W
1 x USB-C	100W

BLUETOOTH CONNECTION

The PS1800 PRO features built in Bluetooth connectivity, allowing you to monitor and control your power station from your device via the iTechworld Connect app.

To get started, scan the relevant QR code below or search for "iTechworld Connect" in the App Store or Google Play.



USER GUIDE



IOS



ANDROID

UPS MODE

The PS1800 PRO features a bypass function, meaning power will not pass through the battery; it is taken directly from the AC output.

In this mode, the power source is the power grid. In the event of an emergency power outage, the power source will switch to the battery within 10ms, fast enough to keep sensitive electronics running without interruption.

To use UPS mode, connect the PS1800 PRO between the wall socket and the electrical appliance, ensuring the power of the PS1800 PRO is switched ON. When you turn on the electrical appliance, power will be taken directly from the grid. In this state, when the power grid is cut off, the unit will automatically switch to the PS1800 PRO's internal battery to supply power.

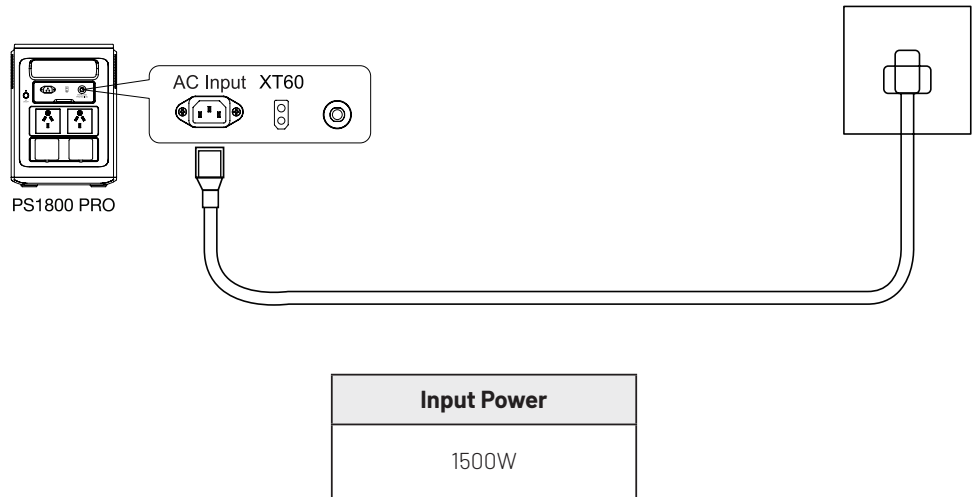
UPS Max
2000W

NOTE: If the AC output exceeds the rated maximum in UPS mode, the AC overload indicator will illuminate on the display.

CHARGING

AC

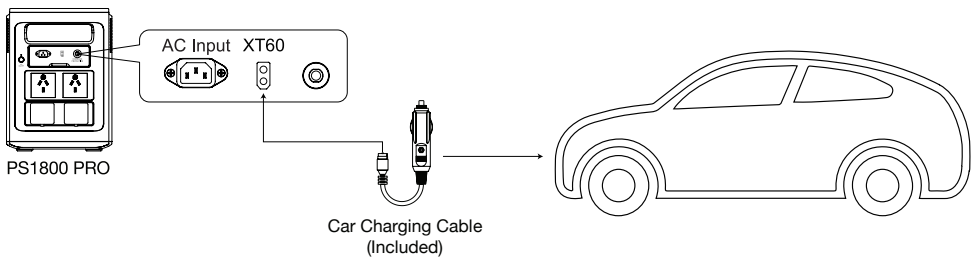
Use the AC charger provided to charge the power station. It takes only 1 hour to fully charge the PS1800 PRO from 0 to 100%.



WARNING: Charge directly via an AC 240V mains outlet only. Do not use extension cords, and do not share the socket with other high-wattage devices, as this may activate the household circuit breaker.

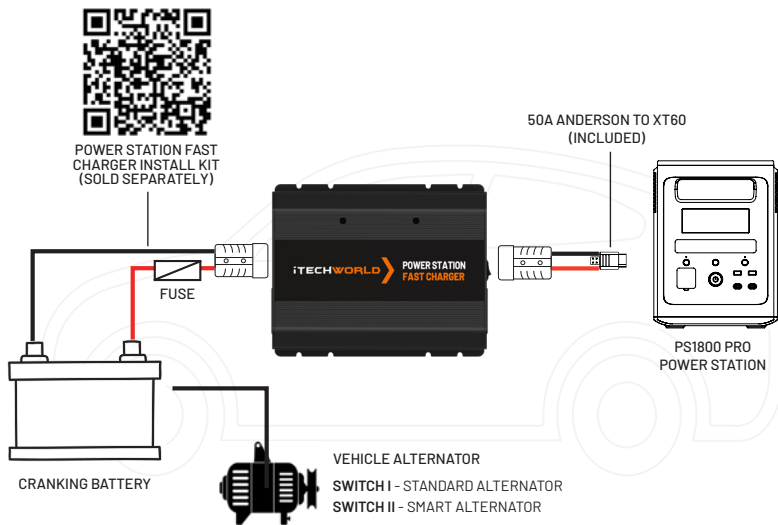
DC

It's important to use the car charger provided with the unit for charging. Car chargers usually provide lower power outputs, typically around 90-120 watts, so charging times may be extended. If you require a quicker charge, use the AC adapter that came with the device, as it provides a higher power output and is better suited to fast charging.



ALTERNATOR

The PS1800 PRO can also be charged directly from your vehicle's alternator while driving via the Power Station Fast Charger (sold separately), making it easy to top up on the go.

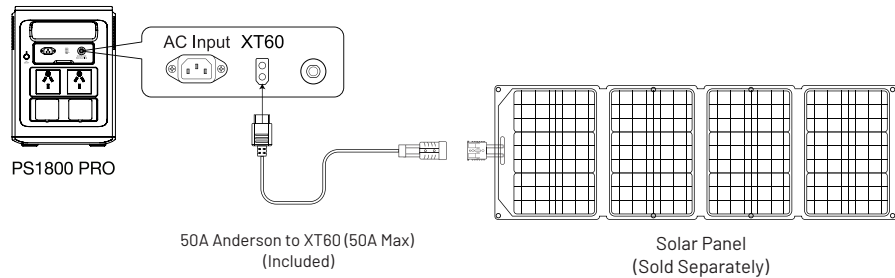


SOLAR

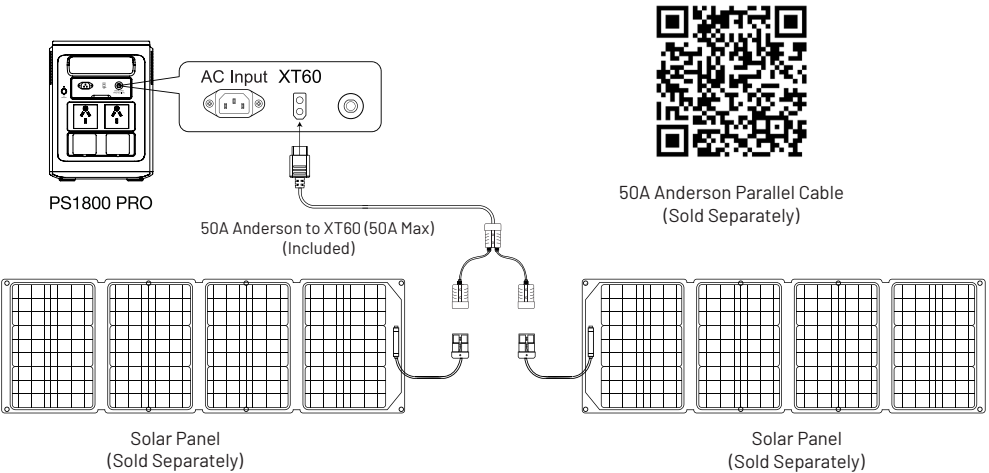
1. Do not charge the PS1800 PRO via a solar panel with a voltage exceeding 90V.
2. Supports 1200W max solar input (solar panels not included); charging time depends on the solar panel input.
3. Verify that there is no regulator in the line. Unregulated solar power should be used, as the PS1800 PRO already contains a built-in regulator.

WARNING: Do not use a regulated solar panel with this unit, as it already contains a built-in controller. Do not exceed the maximum rated solar input voltage or power for your unit.

Individual Connection



Parallel Connection



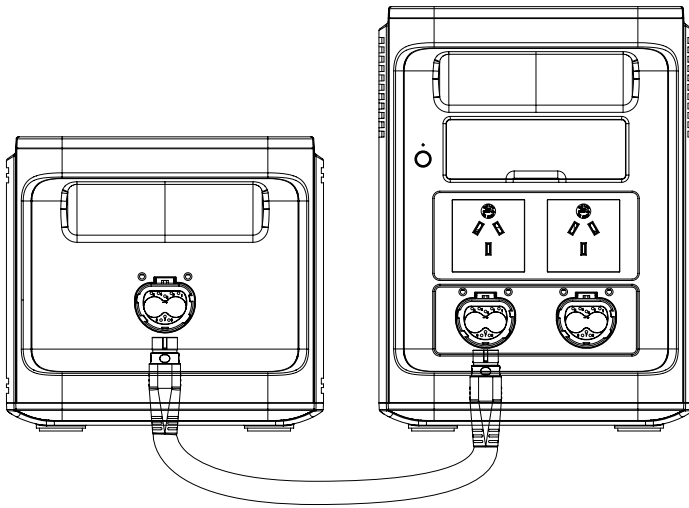
NOTE: The included cable has a maximum rating of 50 amps; do not exceed this limit unless the cable has been upgraded. The XT60 port is an INPUT ONLY port.

BATTERY PACK EXPANSION

You can connect the PS1800 PRO to a maximum of two EB1536 expansion batteries (sold separately), for a maximum combined capacity of 4608Wh, using parallel cables.

Ensure that both the PS1800 PRO and the EB1536(s) are powered off before making the connection. Once the connection is complete, "S1" and "S2" will be displayed on the screen.

After a successful parallel connection, the PS1800 PRO can commence charging or discharging. The PS1800 PRO will charge at a slower rate when it's almost full and will release power faster when in use. If there is no incoming charge, the unit with the higher state of charge will charge the unit with the lower state of charge. The display will show the current power status.



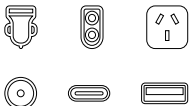
WARNING: Do not connect or disconnect the parallel cable while the PS1800 PRO or an EB1536 is switched ON. Only connect or disconnect the cable when both units are powered off, to avoid any potential electrical hazards or malfunctions.

SPECIFICATIONS

General Specifications	
Model (SKU)	ITW-BTPS1800PRO
Dimensions (LxWxH)	218 x 403 x 295mm
Weight	17.5kg
Capacity	1536Wh
Max parallel capacity	4608Wh
XT60 Output	12-90V, 1200W max
AC Input	50/60Hz (frequency switch available), rated at 1800W Pure Sine Wave. Built-in overload and short-circuit protection.
USB QC3.0	2 x 18W
USB-C	20W
USB-C	100W
Cigarette Lighter Output	12V 10A
Power Off Current	< 500μA
Operating Temperature	-10°C ~ 40°C
Environment Humidity	≤90% RH
Cycle Times	4000 times
Battery Specifications	
Battery Type	LiFePO4
Single Cell Rated Voltage	3.2V
Single Cell Rated Capacity	20Ah
Battery Pack Rated Voltage	38.4V
Battery Pack Output Voltage	35V-43V
Battery Pack Rated Capacity	1536Wh

TROUBLESHOOTING

FAULT CODES

Issue	Possible Cause	Solution
 These Icons flash or beep.	The output has exceeded its rated capacity or a short circuit has occurred.	Remove all connected loads. If the overload protector has activated, press the overload protection button, then press the AC output button. If it has not activated, simply press the AC output button to restore the output.
 These Icons flash or beep.	The unit temperature is either too high or too low.	Remove all loads, disconnect from charge, and turn the unit off. Allow it to reach operating temperature (-10°C to 40°C) before restarting.
 This icon flashes or beeps and the unit does not charge.	The charging connection is not secure, or is faulty.	Check that all charging cables are properly connected to both the unit and the power source.

MAINTENANCE

1. Store the unit in a dry, cool, well-ventilated area away from direct sunlight, heat sources and flammable materials.
2. Store at temperatures between -10°C and 40°C.
3. Keep away from water, strong magnets, and environments with corrosive or flammable gases.
4. For long-term storage, discharge the unit from full to empty once every three months, then recharge it to 80%. Ensure the unit is turned off completely.
5. Keep a minimum of 30cm of clear space around the ventilation and exhaust vents at all times. The internal cooling fan will activate automatically under high load or input; this is normal operation.

SAFETY PRECAUTIONS

For safe operation and optimal performance, the iTechworld PS1800 PRO must be operated correctly. Please carefully read, understand, and follow all instructions and guidelines in this user guide. Failure to follow these instructions may result in damage to the unit, property, death, or serious injury.

Disclaimer: While iTechworld has taken every precaution to ensure the accuracy of the contents of this user guide, iTechworld assumes no responsibility for any errors or omissions.

Furthermore, all specifications and functionality may change without notice at any time.

It is best to view our website for the most up to date information.

THIS UNIT IS NOT WATERPROOF: Do not use, charge, or store the PS1800 PRO in wet conditions or near water. This includes rain, splashing, condensation, and high humidity environments. Water damage is not covered under warranty.

WARNING:

This unit should not be used by people with physical, sensory, or cognitive impairments without appropriate supervision. Keep out of reach of children.

WARNING:

Avoid use in extreme temperatures, direct sunlight, or near open flame.

WARNING:

Only use cables and accessories recommended in this guide. Use of incorrect cables may result in damage, electrical shock, or fire.

WARNING:

Turn the unit off and disconnect all cables when not in use.

WARNING:

Do not use if the unit shows signs of damage or defect.

WARNING:

Do not drop the unit.

DANGER: Do not disassemble or modify the unit. Doing so will void your warranty and may result in electrical shock, fire, or serious injury.

EXPLOSION HAZARD:

Do not use in enclosed spaces where flammable fumes or gases are present, including near gas bottles, petrol engines, or lead-acid battery compartments.

LIMITATIONS OF USE:

This unit is not suitable for use with life support systems or medical equipment.

iTECHWORLD

THE POWER EXPERT

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At iTechworld, we proudly lead the way in pioneering innovative off-grid power and battery solutions that bring cutting-edge technology to adventure seekers, remote workers, and outdoor enthusiasts across Australia. Since we began our journey all the way back in 2006, our passion has been to develop high-performance lithium batteries, solar panels, power stations, generators, and battery management systems tailored to caravans, camping, 4WDs, and off-grid living.

We believe in empowering people with reliable, portable, and efficient energy solutions, giving them the power they need—wherever their journey takes them. Our commitment to quality is unwavering, with every product rigorously tested to meet Australian conditions and backed by our knowledgeable power experts.

Driven by innovation, reliability, and sustainability, iTechworld is your trusted partner in power solutions, helping you stay powered anywhere, anytime.

iTechworld. The Power Expert.

LOVE YOUR PS1800 PRO POWER STATION? LEAVE A REVIEW

