

SUNTECH GT200 Pro

LiFePO4 Portable Power Station

Technical Datasheet



1. Product Overview

The SUNTECH GT200 Pro is a compact LiFePO4 (lithium iron phosphate) portable power station with a 320 Wh battery capacity. It provides pure sine wave AC output, DC5521 outputs, QC3.0 fast charging, bidirectional USB-C PD, and a built-in LED work light, with charging available from AC adapter, solar panel (via built-in MPPT), or car charger.

2. Key Specifications Summary

Product Model	GT200 (Pro variant)
Battery Capacity	320 Wh
Cell Chemistry	LiFePO4 (Lithium Iron Phosphate)
AC Rated Output Power	240 W
AC Peak Output Power	400 W
AC Output Waveform	Pure Sine Wave
Cycle Life	3500 cycles (remaining capacity above 80%)
Product Size	242 x 204.8 x 88 mm
Weight	~4 kg

3. Battery & Charging

3.1 Battery

Cell Type	LiFePO4 Battery
Battery Energy	320 Wh
Cycle Life	3500 cycles, remaining capacity above 80% thereafter
Charging Temperature	0°C to 40°C
Discharge Temperature	-10°C to 40°C
Storage Temperature	-10°C to 40°C
Safety Protection	Temperature control, surge protection, short-circuit protection, and other safeguards

3.2 Charging Inputs

DC Adapter Input	20 V, 3 A
PD Input (via USB-C)	5 V/9 V/12 V/15 V/20 V, 3 A (max. 60 W)
Full Charge Time (adapter + PD simultaneously)	Approx. 3.0 hours (320 Wh)
Solar Charge Input	12-28 V, max. 3 A (max. 60 W), built-in MPPT
Car Charger Input	12 V, 4 A

DC adapter charging and PD charging can be used at the same time to maximize charging speed. Built-in MPPT (Maximum Power Point Tracking) technology continuously compares solar panel output voltage against battery voltage in real time to identify the optimal charging power point, maximizing solar charging efficiency.

4. Output Ports & Ratings

AC Output (x1)	220-240 Vac, 50 Hz (110V 50/60Hz and other region plug variants available) — Rated 240 W / Peak 350 W, Pure Sine Wave
DC5521 Output (x2)	12 V, up to 8 A combined (max. single port 10 A, max. 120 W); each port can power a cigarette-lighter-style load up to 120 W
QC3.0 Output (x2)	5 V/3 A, 9 V/2 A, 12 V/1.5 A (max. 18 W)
USB-C Output/Input (x1)	5 V/9 V/12 V/15 V/20 V, 3 A (max. 60 W), bidirectional (PD in/out)
LED Light	3 W, with normal and SOS strobe modes

4.1 Port Notes

- The two USB-A (QC3.0) ports support up to 3 A single-port output, with automatic device detection and power distribution for fast charging.
- USB-C is a bidirectional PD port supporting up to 60W input and output; a 60W+ PD source and a 3A-rated cable are recommended.
- Each DC5521 output can power a cigarette-lighter-style device rated up to 120 W; total DC output current is intelligently distributed between the two ports.
- Short-circuit protection on DC output: if a short circuit is detected, DC output stops automatically; after clearing the fault, short-press the power button to reset.
- AC output is protected against under-voltage, overload, short-circuit, and over-temperature conditions via a double-isolation circuit; on fault, the AC icon flashes and the unit shuts down automatically for safety.

5. Controls & Operation

Power On (DC + USB)	Press and hold the power button for 2 seconds
Turn On AC Output	After power-on, short-press the power button again (AC icon lights up)
Turn Off AC Output	Short-press the power button while AC is active
Power Off	Press and hold the power button for 2 seconds
Auto-Shutdown	Shuts down after 3 minutes with no load (output current < 80 mA) if AC is off; toggled via combination button (hold power + tap light button)
AC Frequency Switch	Default 50 Hz; hold power button, then hold light button for 3 seconds to switch to 60 Hz (same action toggles back to 50 Hz)
LED Light	Click to cycle: sleep-light mode, full light mode; hold 3 seconds for SOS strobe; click again to turn off

The power button and light button can form a combination button; once set, the configuration remains active long-term.

6. Display Indicators

The LED screen shows: battery level (%); AC output icon; DC output icon; sleep-mode icon; LED-light-on icon; 50Hz/60Hz frequency toggle icon; low-temperature alarm icon; high-temperature alarm icon; and a general abnormal-alarm icon.

7. Physical & Environmental Specifications

Product Size	242 x 204.8 x 88 mm
Weight	~4 kg (320 Wh variant)
Operating Temperature (per safety instructions)	-10°C to 40°C
Charging Temperature	0°C to 40°C
Discharge Temperature	-10°C to 40°C
Storage Temperature	-10°C to 40°C
Recommended Storage Maintenance	Charge and discharge once every 3 months during long-term storage
Cooling	Automatic air-cooling fan activates when internal temperature reaches approx. 60°C during high charge/discharge power

8. Package Contents

- 1 x GT200 Pro Portable Power Station
- 1 x Power Adapter
- 1 x Car Charger Cable
- 1 x Car Charger Connector
- 1 x MC4 Solar Charging Cable
- 1 x User Manual

9. Safety Instructions (Summary)

- Read all instructions before use; keep away from unsupervised children.
- Do not insert fingers/hands into the unit; keep away from rain and snow.
- Use only chargers/power supplies recommended by the manufacturer.
- Do not use if damaged or modified; do not disassemble — service only by qualified personnel with identical replacement parts.
- Turn off when not in use; store in a cool, dry place; avoid hot or humid environments.
- Operating temperature: -10°C to 40°C.
- If unused for extended periods, charge and discharge once every 3 months.
- Mild warmth during charging is normal; battery performance will gradually decline over years of use.
- Do not clean with harmful chemicals or detergents; avoid dropping or excessive force.
- When disposing of cells/batteries, keep different electrochemical systems separated.

10. Warranty

The product is replaced free of charge under the terms of the manufacturer's warranty policy when used according to the manual and if it fails within the warranty period. Warranty does not cover failure from misuse, improper storage (complete discharge), non-designated power adapters, unauthorized repair/disassembly/modification, accidental damage (drops, vibration, water ingress, condensation), natural disasters, cosmetic changes from normal use, or operation outside the rated temperature range. Shipping costs for warranty returns are the customer's responsibility. Proof of purchase (receipt, order number, or invoice) is required for warranty claims.