

Portable Power Stations

Toyomax PPS Series Portable Power Station (300W – 1000W)

Product Title: Toyomax PPS Series Portable Power Station

Subtitle: Compact, Ultra-Safe LiFePO4 Outdoor & Off-Grid Backup Power Solution (1004.8Wh – 2009.6Wh)

Overview

The Toyomax PPS Series (300W to 1000W) is a versatile, high-efficiency portable power station designed for off-grid outdoor activities, home emergency backup, mobile workspaces, and fieldwork. Powered by long-life Lithium Iron Phosphate (LiFePO4) chemistry delivering over 6,000 cycles, the PPS Series features pure sine wave AC output, fast grid and solar recharging, multi-port DC/USB connectivity, and integrated emergency LED lighting. Encased in a durable metal shell with an ergonomic carrying handle, it provides quiet, emissions-free plug-and-play energy wherever you go.

Key Features & Highlights

- **Safe & Durable LiFePO4 Battery:** Utilizes premium LiFePO4 cell technology offering 6,000+ life cycles at 80% SOC for years of dependable daily use.
- **Pure Sine Wave AC Output:** Delivers stable, continuous AC power (300W, 500W, or 1000W options) safe for sensitive electronics like laptops, medical equipment, TVs, and small appliances.
- **Ultra-Fast Recharging:** Quick AC grid recharging in 2 to 4 hours, alongside integrated high-efficiency MPPT solar charging capabilities.
- **Multi-Device Output Ports:** Equipped with universal AC sockets, dual USB-A ports, Type-C delivery, and DC 5521 outputs to power multiple devices simultaneously.
- **Seamless UPS Function:** Features ultra-fast grid-to-battery transfer (<15ms to <20ms) to keep critical devices running during sudden power outages.
- **Rugged & Ergonomic Design:** Sturdy metal enclosure built for durability with a simple, easy-to-carry handle for maximum portability.
- **Comprehensive Multi-Level Protection:** Includes built-in safety protection against input overvoltage/undervoltage, output overload, battery overcharge/overdischarge, short circuits, and overtemperature.

Estimated Appliance Discharge Performance (Based on 1 kWh Capacity)

- **LED Light (20W):** ~50 Hours

- **Standing Fan (30W):** ~33 Hours
- **Television (100W):** ~10 Hours
- **Smartphone Charge (2942mAh):** ~90 Recharges
- **Laptop (60W):** ~16 Hours
- **Car Refrigerator (60W):** ~16 Hours
- **Projector (100W):** ~10 Hours
- **Electric Hair Dryer (200W):** ~5 Hours
- **Radio:** ~100 Hours
- **Pet Feeder (6W):** ~166 Hours

Technical Specifications

Specification Parameter	PPS300	PPS500	PPS1000
Rated AC Power	300W (Pure Sine Wave)	500W (Pure Sine Wave)	1000W (Pure Sine Wave)
Battery Capacity	3.2V, 1004.8Wh	3.2V, 1004.8Wh	6.4V, 2009.6Wh
Battery Chemistry	LiFePO4 (Single Cell 314/280Ah)	LiFePO4 (Single Cell 314/280Ah)	LiFePO4 (2* Cell 314/280Ah)
Cycle Life	6000 Times @ 80% SOC	6000 Times @ 80% SOC	6000 Times @ 80% SOC
Rated AC Output Voltage	230V, 50/60Hz	230V, 50/60Hz	230V, 50/60Hz
AC Output Sockets	Universal Socket *1	Universal Socket *1	Universal Socket *2
DC Output Ports	USB-A *2, Type-C *1, DC 5521 *3	USB-A *2, Type-C *1 (15W Max)	USB-A *2, Type-C *1

Specification Parameter	PPS300	PPS500	PPS1000
AC Grid Recharging Time	3 – 4 Hours (100-270Vac, Max 300W)	2 – 3 Hours (155-270Vac, Max 500W)	2 – 3 Hours (155-270Vac, Max 1000W)
Solar Input Recharging Time	3 – 4 Hours (MPPT 12-55Vdc, Max 300W)	2 – 3 Hours (MPPT 12-55Vdc, Max 350W)	2 – 3 Hours (MPPT 12-55Vdc, Max 450W)
UPS Transfer Time	< 20 ms	< 15 ms	< 15 ms
Case Shell Material	Metal	Metal	Metal
Protection Rating	IP20	IP20	IP20
Operating Temperature	-10°C to 40°C	-10°C to 40°C	-10°C to 40°C
Product Dimensions (L*W*H)	294 x 133 x 194 mm	294 x 140 x 194 mm	L294 x W140 x H194 mm
Net Weight	8.8 kg	9.0 kg	15.5 kg
Certifications	UN38.3, CE	UN38.3, CE	UN38.3, CE
Standard Package	1* Power Station, 1* AC Power Cord, 1* User's Manual	1* Power Station, 1* AC Power Cord, 1* User's Manual	1* Power Station, 1* AC Power Cord, 1* User's Manual

Key Applications

Outdoor camping, road trips, mobile photo/video production, home emergency lighting, remote workstation power, and small appliance backup during load-shedding.