

PBOX[®]
www.pboxlighting.com

P7 Series Solar Home System

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P7 Series Solar Home System

P7 Solar Home System is an independent photovoltaic system composed of the built-in lithium battery, a controller, solar panels and a standard USB interface. It meets the home lighting and basic living energy demand in remote rural areas.

P7 series Solar Home System is powerful and reliable, equipped with 100~200W solar panels and 410~820Wh battery capacity. Users can charge LED lights, fans, mobile phones, iPads, MP3 players, computers, televisions, refrigerators and other household appliances through the USB/DC/inverter interface.

This eco-friendly power supply system is another flagship product from PBOX to achieve the vision, which is to make solar applications available to everyone in the world.





Light(Optional)

Solar panel (Optional)

DC Output 5A

DC Output 2A

Cigar Lighter

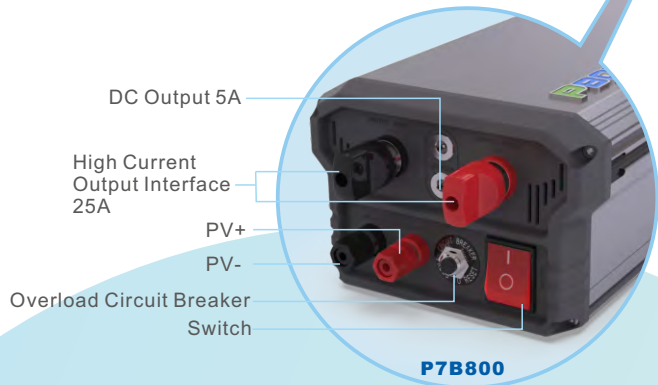
PV+

PV-

Overload Circuit Breaker Switch

P7B400

AL6063T5 Aluminum Alloy Housing
LiFePO4 Lithium-ion Battery
Switch
Power Indicator Light/
Fault Indicator Light
4 USB Output Port



DC Output 5A

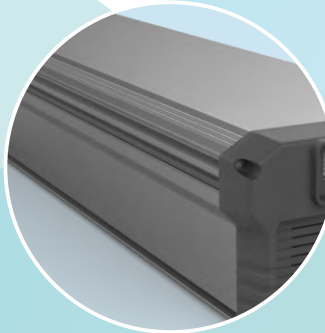
High Current Output Interface 25A

PV+

PV-

Overload Circuit Breaker Switch

P7B800



High strength engineered plastics are used to ensure the covers of both ends of the shell to be free of yellowing and brittle.

AL6063T5 aluminium alloy is chosen as the main body of the shell due to its superior strength and high heat-dissipation rate, providing users with maximum security.

Benefit

High Strength Aluminum Frame Structure

- > Corrosion Resistance
- > Strong and heat resistance
- > V2 flame retardant rating, no spark



Rear cover is equipped with an overload circuit breaker, which can immediately disconnect the output when the system has overloaded to protect the system. The output can be recovered by pressing the overload circuit breaker again.

Flexible Interface Design

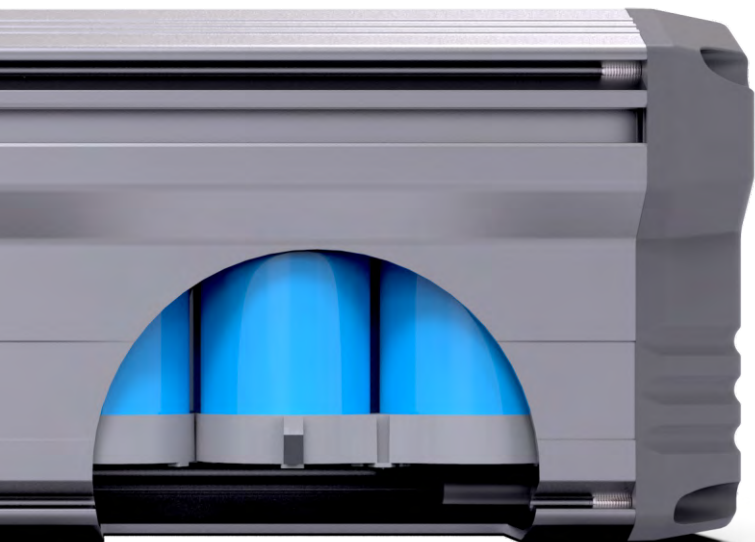
- Different configurations designed to satisfy different needs
- Able to satisfy the multicultural demands of the clients, more user-friendly



P7B400



P7B800



High Efficient Lithium LiFePO4 Battery

- Battery capacity from 410~820Wh
- Over 2000 charge and discharge cycles
- More than 8 years life span
- Green and environmental-friendly
- High level of security: Resistant to high temperature, impact and compression.

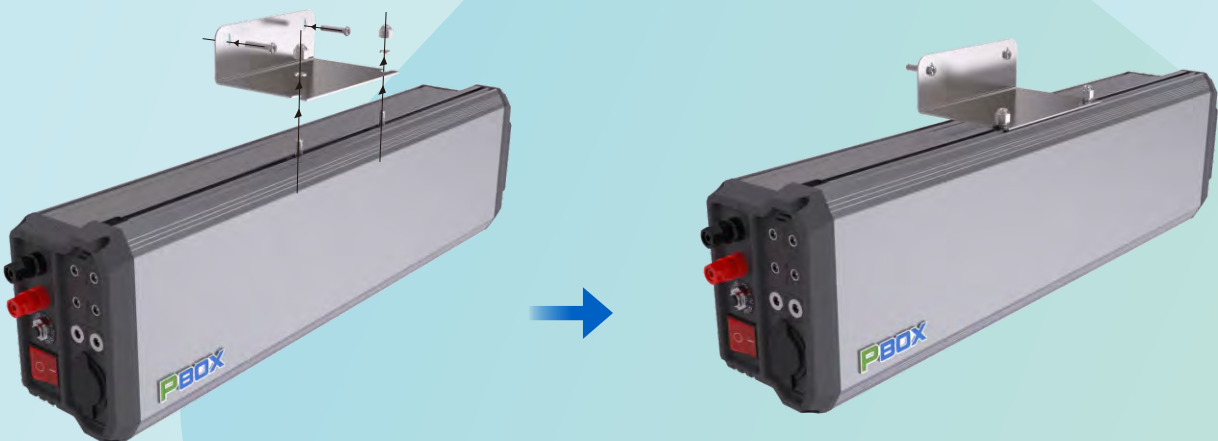


High Power Output

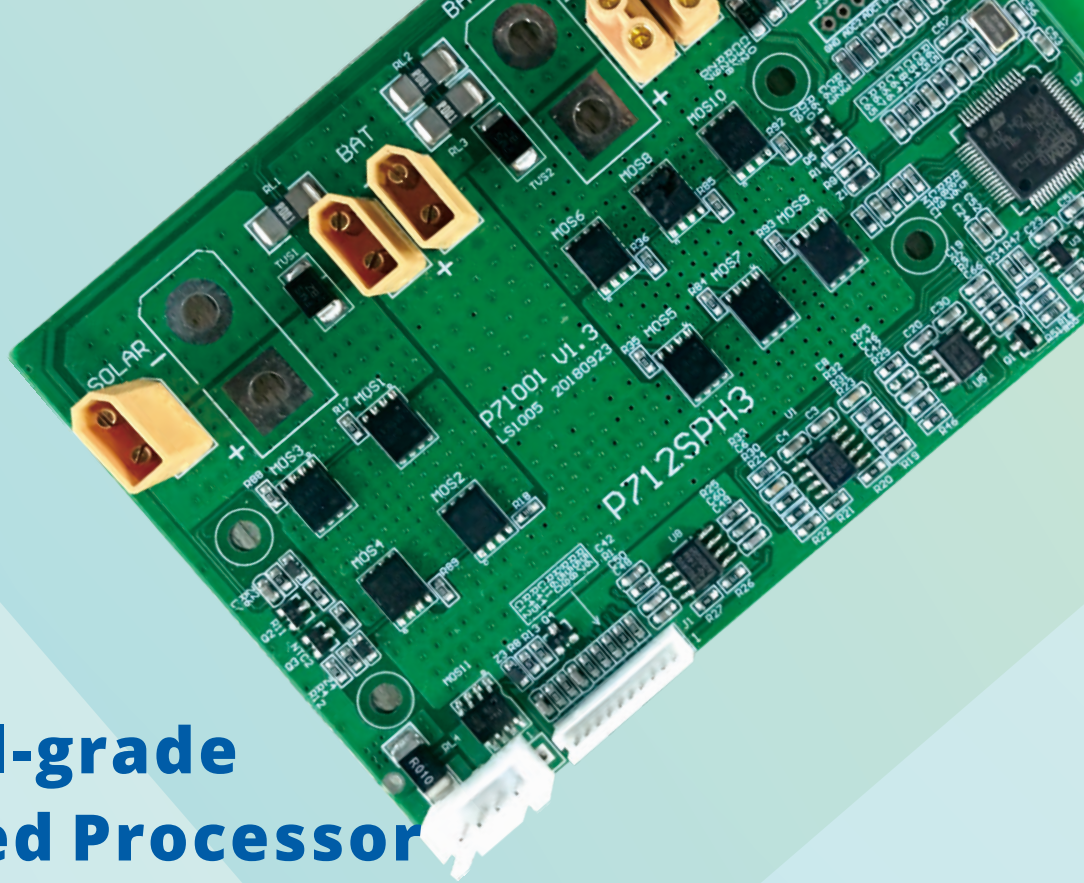
- > In-built high power out-put controller. The maximum output power is up to 300W, which meets the high power load requirement.

Easy Installation

- > The Solar panels can be quickly installed on the roof or ground by our special mounting brackets.
- > The device host can be placed on a desktop or mounted on the be mounted on a wall.



The wall-mounted installation method is shown below.



Industrial-grade High-Speed Processor

- Core technology determines the stability of the system
- The stability of the system makes the products more reliable and practical

Safe & Reliable

- Advanced circuit design, battery charge and discharge efficiency is about $96\pm 2\%$.
- The system voltage is less than 36V. The voltage output of the whole system components belongs to the safe range, and ensures that it is harmless to people and animals, safe and stable.
- 30A high-current battery management system is accompanied with a voltage balancing function, which not only prolongs the battery life span, but also provides a over-voltage, short circuit and reverse connection protection.



P7 Parameter



Model	P7B400	P7B800
Battery Capacity (Wh)	410	820
USB Output	5V2.1A (4pcs 7.2Amax)	5V2.1A (4pcs 7.2Amax)
Cigar Lighter	11~15V 10A	/
DC Output (5521)	11~15V 5A (2pcs) & 2A (4pcs)	11~15V 5A (2pcs)
High Current Output Interface	/	11~15V 25A
Max Total Output	12V15A	12V30A
Rated Charging Input	17~22V 10A	17~22V 20A
Net weight (kg)	5.5	9
Product Dimension (mm)	484(L)×152(W)×103(T)	777(L)×152(W)×103(T)
Gross Weight (kg)	8	12
Packing Dimension (mm)	545×200×160	815×200×160
Physical Dimensions (mm)		

Optional Solar Panel Parameter

Model	PV100-18	PV200-18
Power (W)	100	200
Voltage (V)	18	18
Dimension (mm)	1070×540×30	1565×715×30
Dimension of Carton (mm)×4Set	1120×225×615	1615×225×770
Gross Weight of Product (kg)	12	20
Product Dimension Chart		

Optional Parts I - LED Bulb

Model	B250	B500	 B250 B500
Typical Luminous Flux (lm)	250	500	
Dimming Brightness	100%,50%	100%,50%	
Power (W)	2	4	
Input Voltage (V)	12	12	
Color Temperature (K)	5000	5000	
Color rendering index (Ra)	80	80	
Switch	wall rocker	wall rocker	
Wiring	cable 4m switching line + 4m extension line 4		
Dimension (mm)	Φ93×84	Φ118×88	
Packing dimension (mm)	95×95×95	125×125×100	

Optional Inverter Parameters

Model	IP350-12	IP350-11
Rated Input Voltage	12VDC	12VDC
Input Voltage Range	10.8~16VDC	10.8~16VDC
Input Surge Voltage	<32VDC	<32VDC
Output Voltage	220VAC (± 5%) 230VAC (-7% ~ + 5%)	110VAC (± 5%) 20VAC (-10% ~ + 5%)
Output Frequency	50/60±0.1Hz	50/60±0.1Hz
Output Continuous Power (W)	280W	280W
Output Power 15 min. (W)	350W	350W
Surge Power (W)	750W	750W
Power Factor	0.2-1(VA lower than output continuous power)	
Output Wave	Pure sine wave	
Distortion THD	THD≤3%	THD≤5%
Max. Efficiency	91%	90%
No-load Current	<0.7A	<0.7A
USB Output Port	5VDC/Max.1A	5VDC/Max.1A
Binding Post (mm)	Φ6mm	Φ6mm
Overall Dimension(mm)	214 × 105.5 × 57.7mm	214 × 105.5 × 57.7mm
Mounting Dimension(mm)	185.5 × 76.7mm	185.5 × 76.7mm
Mounting Hole Size(mm)	Φ4.2mm	Φ4.2mm
Net Weight	1.0kg	1.0kg



Optional 16 inch BL DC stand fan

Model	LD-722
Motor	Brushless DC motor 12V
Motor Power (W)	10W±1W
Safety Voltage (V)	9V-15V
Blade	3 pcs ox leaf blade
Oscillation	Yes
Air speed Set	3
Color	White
Rpm	1130 rpm ±50 rpm
Packing Dimension (cm)	48×13×51cm
Gross Weight (kg)	5.2



LD-722

Optional 19'/32' LED TV

Specification	19'	32'
Display Type	TFT LCD	TFT LCD
Aspect Ratio	16:9	16:9
Resolution	1366×768	1366×768
Brightness	75±10%	75±10%
Viewing Angle	170°(H)×160°(V)	176°(H) × 176°(V)
Power ON Consumption	≤10W	≤20W
Standby Consumption	≤0.5W	≤0.5W
Max Audio Output Power	2×0.5W	2×3W (8Ω)
Unit (mm)	438×169×301	731×209×474
1PC/1Carton (mm)	498×108×326	786×115×506
Net (kg)	1.8	3.72
Gross (kg)	2.7	5.29



19'



32'