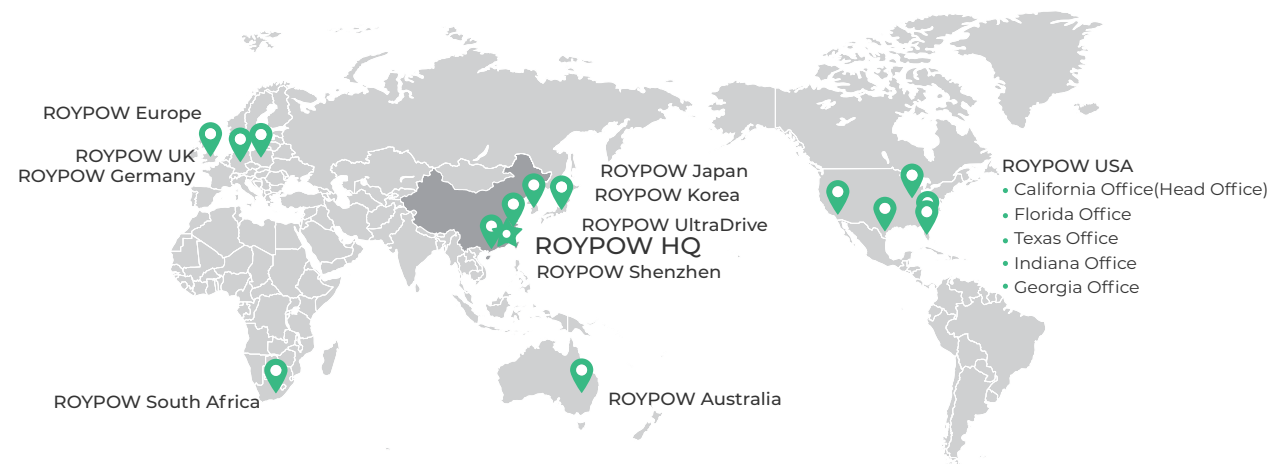


ROYPOW, For One-stop New Energy Solutions

- R&D, manufacturing and sales of motive power systems and energy storage systems as one-stop solutions
- Fully automatic production lines, a full range of test equipment and an advanced MES
- Covering Low-Speed Vehicles' Batteries, Industrial Batteries, as well as Residential ESS, Commercial & Industrial ESS, and Mobile ESS
- Self-development of power electronics technologies, including PCS, BMS, and EMS



Made in China



ROYPOW RESS 3 - 5 kW / 5 - 40 kWh

PowerHome

Intelligent Residential Energy Storage System

2
MPPTs

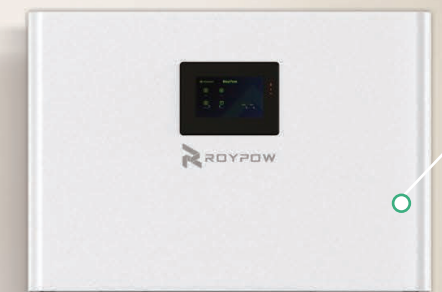
35 dB
Max. Noise

7 kVA
Max. AC Input

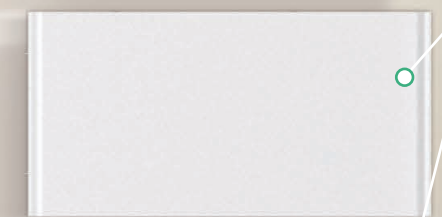
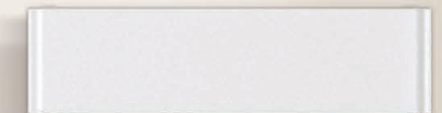
7 kW
Max. PV Input

10 Years
Warranty

Euro-standard



Inverter Module



Battery Modules



IP65 Protection



Integrated Multiple Protections



Natural Cooling



Smart Load Function



Modular & Integrated Design



Smart App & Web Management



ROYPOW Technology Co., Ltd.

sales@roypow.com www.roypow.com

ROYPOW Industrial Park, No. 16, Dongsheng South Road, Chenjiang Street, Zhongkai High-Tech District, Huizhou City, Guangdong Province, China

Series Name: Power Home

System Specification

Model	SUN3000S-E/I	SUN3600S-E/I	SUN4000S-E/I	SUN4600S-E/I	SUN5000S-E/I
PV terminal parameters					
Max. Input Power (W)	4600	4600	6000	6000	7000
Max. Input Voltage (Vdc)	580				
MPPT Voltage Range (Vdc)	120~550				
MPPT Voltage Range (Full Load)	180~550V	180~550V	200~550V	200~550V	200~550V
Start Voltage (Vdc)	150				
Max. Input Current (Adc)	13.5 / 13.5				
Max. Short Current (Adc)	16 / 16				
No. of MPPT	2				
No. of String per MPPT	1				

Battery input/output parameters

Battery Type	Lithium-ion				
Maximum Voltage (Vdc)	60				
Norminal Voltage (Vdc)	48				
Operation Voltage Range (Vdc)	40-60				
Max. Charge / Discharge Power (W)	3000 / 3000	3600 / 3600	4000 / 4000	4600 / 4600	5000/5000
Max. Charge / Discharge Current (Adc)	62.5 / 62.5	75/75	83.3 / 83.3	95.8 / 95.8	100/100
Battery Charge Method	Self-Adaption to BMS				

Grid terminal input parameters

Max. Continuous Input Active Power(W)	6200	7000	7000	7000	7000
Max. Input Apparent Power (VA)	6200	7000	7000	7000	7000
Max. Input Current (Aac)	30				
Max. Continuous Input Current from Grid to Battery (Aac)	13.6	16.0	18.2	20.9	22.0
Max. Continuous Input Power from Grid to Battery (W)	3000	3600	4000	4600	5000

Grid terminal output parameters

Rated Grid Voltage (Vac)	230 Vac / L+N+PE				
Rated Grid Frequency (Hz)	50				
Rated Apparent Power (VA)	3000	3600	4000	4600	5000
Rated Output Power (W)	3000	3600	4000	4600	5000
Rated Output Current (Aac)	13	15.7	17.4	20	21.7
Max. Output Apparent Power (VA)	3000	3600	4000	4600	5000
Max. Output Active Power [W]	3000	3600	4000	4600	5000
Max. Output Current (Aac)	13.6	16	18.2	20.9	22
Adjustable Power Factor	0.8 leading to 0.8 lagging				
THDI (Rated Power)	<3%				

Backup terminal parameters

Rated Output Power (W)	3000	3600	4000	4600	5000
Rated Apparent Power (VA)	3000	3600	4000	4600	5000
Rated Output Current (Aac)	13	15.7	17.4	20	21.7
Rated Output Voltage (Vac)	230				
Rated Frequency (Hz)	50				

Model	SUN3000S-E/I	SUN3600S-E/I	SUN4000S-E/I	SUN4600S-E/I	SUN5000S-E/I
Backup terminal parameters					
Maximum Continuous Output Current (Aac)	13	15.7	17.4	20	21.7
Maximum Output Active Power (W)	3000	3600	4000	4600	5000
Maximum Output Apparent Power (VA)	3000	3600	4000	4600	5000

Backup terminal parameters

THDV (@Linear Load)	< 3%
Back-up Switch Time	< 20ms (Typical 10ms)
Overload Capacity	105%< Load≤125%, 10min. 125%< Load≤150%, 1min. 150%<Load Rate, 10S

Efficiency

Max. Efficiency (BAT to AC)	93.8%
Max. Efficiency (PV to BAT)	94.5%
Max. Efficiency (PV to AC)	97.0%
Euro. Efficiency	96.2%
Max. MPPT Efficiency	99.9%

Protection

DC Switch	Yes
GFCI	Yes
Anti-islanding Protection	Yes
DC Reverse-polarity Protection	Yes
Output Over/Under Voltage Protection	Yes
Output Over Current Protection	Yes
AC Short Circuit Protection	Yes
Insulation Resistor Detection	Yes
DC/AC Surge Protection	Type Ⅲ / Type Ⅲ

General Data

Series Name	PowerHome
PV Connection	MC4/H4
DC Switch	Integrated
Dimensions (WxDxH, mm)	650 x 240 x 620
Net Weight (kg)	35
Operating Temperature Range	-25~60 C (45 C derating)
Relative Humidity	0~95%
Max. Altitude(m)	3000
Electronics Protection Degree	IP65
Topology Type	Non-isolated
Night Self Consumption (W)	<10
Cooling	Natural
Noise (dB)	<35
Display	WiFi + APP / LCD
Communication	RS485/CAN/WiFi
Overvoltage Category	Ⅱ (PV, BAT) / Ⅲ (Grid, Load)
Active anti-islanding method	Reactive power perturbation method
Production	Made in China

Standard Compliance

Safety / EMC	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-3
Grid Connection Standard	VDE-AR-N 4105, NRS 097, EN 50549, G98, G99, AS 4777.2

1. All pictures shown are for reference only and data are based on ROYPOW standard test procedures.
2. Actual performance may vary according to local conditions. Only authorized personnel are allowed to operate or make adjustments to the system.
3. We reserve the right to make revisions as well as product alterations and improvements at any time without prior notice.