

PowerStation Series
Air-Cooled Energy Storage System

- ✓ Up to 6 Unit in Parallel
- ✓ Comprehensive Safety Protections
- ✓ Compatible with Diesel Generators for Fuel Saving
- ✓ Support Three-Phase 230V/400V Power Distribution
- ✓ IP54 Enclosure Rating
- ✓ Support Remote Upgrade
- ✓ Support P/Q and V/F Modes
- ✓ Support Mixed Operation of New & Used Batteries
- ✓ 10 Years of Warranty



Technical Specifications

Model	Power Station 2045	Power Station 2560	Power Station 3060
Battery Parameters			
Nominal Energy (kWh)	45.6	60.8	60.8
Nominal Voltage/Voltage Range (V)	316.8 / 277.2 - 361.35	422.4 / 369.6 - 481.8	422.4 / 369.6 - 481.8
Charge Discharge Rate (C)	0.5 / 0.5		
Number of Battery Optimizer	2	2	2
Number of Battery Pack	6	8	8
Battery Pack Model		RBmax7.6MH	
Nominal Energy	7.6 kWh (33S1P, 3.2 V 72 Ah)		
Nominal Voltage/Voltage Range (V)	105.6 / 92.4 - 120.45		
Max. Continuous Working Current	50 A		
Cycle Life	6000 @ 25°C,90% DOD, 0.5C / 0.5C, 70% EOL		
Dimension (W×D×H) (mm / inch)	500 x 760 x 148 / 19.69 x 29.92 x 5.83		
Net Weight (kg / lbs)	67 / 147.7		
Battery Optimizer Model		RMH95050	
DC Working Voltage (V)	550 - 950		
Nominal Power (kW)	15		
Dimension (W×D×H) (mm / inch)	500 x 660 x 228 / 19.69 x 25.98 x 8.98		
Net Weight (kg / lbs)	51 / 112		
Inverter Model	SUN20000T-EI	SUN25000T-EI	SUN30000T-EI
Input (PV)			
Max. Power (W)	45000		
MPPT Range (Full Load) (V)	340 ~ 800	270 ~ 800	340 ~ 800
MPPT Range (V)	160 ~950		
Max. DC Voltage (V)	1000		
Start Voltage (V)	180		
Max. DC Current (A)	30 / 30	30 / 30 / 30	30 / 30 / 30
MPP Tracker No.	2	3	3
String No.	2+2	2+2+2	2+2+2

Input (DC BUS)			
Compatible Battery Type		Lithium-ion	
Bus Voltage Range (V)		550-950	
Max. Charge / Discharge Current (A)		50	
Lithium Battery Charge Curve		Self-adaption to BMS	
Output (On Grid)			
Nom. Power (Output) (W)	20000	25000	30000
Maximum Apparent Power (Output) (VA)	22000	27500	33000
Nominal Voltage (V)		380 / 400 (Three Phase)	
Nominal AC Frequency (Hz)		50 / 60	
Nominal Current (Output) (A)	3 * 33.33 / 3 * 28.9	3*41.67/3*36.3	3*43.5/3*43.5
Maximum Current (Input) (A)		3*63	
Output (BackUp)			
Nom. Power (VA)	20000	25000	30000
Maximum Power (5min) (VA)	24000	30000	36000
Apparent Power (10s) (VA)	30000	37500	45000
Nom. Bypass Power (VA)		45000	
Nominal Back-up Voltage (V)		380 / 400 (Three phase)	
Nominal Back-up Frequency (Hz)		50 / 60	
Nominal Back-up Current (A)	3* 33.33 / 3 * 28.9	3 * 41.67 / 3 * 36.3	3 * 43.5 / 3 * 43.5
THDV		<3% (R Load), 5% (RCD Load)	
Efficiency			
Max. Efficiency (PV to Grid)	98.8%	98.8%	98.8%
Eur. Efficiency (PV to Grid)	97.2%	97.9%	97.9%
Max. Charge Efficiency (PV to Battery)	98%	98%	98%
Max. Charge/Discharge Efficiency (Grid to Battery)	98%	98%	98%
Inverter General			
Temp. Range	-25~60℃	Noise Emission	45 dB
Max. Operation Altitude	4000 m	Humidity	0-100%
Topology	Transformerless	Cooling	Smart Fan
Enclosure Rating	IP65	W x H x D (mm/inch)	650x500x265 / 25.59x19.69x10.43
Weight(kg / lbs)	45 / 99.2		
HMI & COM of Inverter			
Display	LED+APP (Bluetooth)		
Communication Interface	LED + APP (Bluetooth), BMS (CAN / RS485), Wi-Fi / GPRS / 4G / Ethernet (optional), DI (DRM / RCR), Meter (RS485), 1 * DO, USB (Firmware Upgrade)		
Inverter Protection			
Protection	Anti-islanding Protection, AC Over-current Protection, AC Short-circuit Protection, AC Over-voltage Protection, Insulation Detection, GFCI		
SPD	DC Type 2, AC Type 2	AFCI	Optional
RSD	Optional	DC Switch	Internal
System Parameters			
Ambient Temperature (℃)	-20 - 55 (>45 derating)		
Parallel	6		
Storage Environment Temperature (℃)	0~40		
Relative Humidity of Working Environment	5~95%, Non-condensing		
Cooling Method	Intelligent Air-cooled		
Noise Level (dB)	60		
Firefighting Methods	Cell-level Monitoring + Pack level Protection + Cabinet-level Gas Fire Protection (Aerosol)		
Off-Grid Switching Time (ms)	20		
Working Altitude (m)	4000 / 13,123 (>2,000 / >6,561.68 derating)		
Installation Method	Floor-to-ceiling Installation		
Communication Model	CAN, RS485, Dry, 4G / WiFi		
Enclosure Rating	IP54@Battery Cabinet		
Weight (kg / lbs)	926 / 2041		
Size (L x W x H) (mm / inch)	1050 x 685 x 2000 / 41.34 x 26.97 x 78.74		

Note: All data are based on ROYPOW standard test procedures. Actual performance may vary according to local conditions