

SOFAR POWERALL

5 / 6 KW
5 / 10 / 15 / 20 / 25 / 30 kWh

SINGLE-PHASE DUAL MPPT



Product advantages

- Modular and integrated design for easy transportation and installation
- Maximal battery energy with pack optimization
- Flexible battery capacity expansion
- Extremely low battery self-consumption in sleep mode
- User-friendly one-button battery operation
- Switchover time to critical loads less than 10 ms
- Compatible with high current PV panels



Datasheet

System Parameters

System Schematic						
Rated output power	3000-6000W					
Qty.of batteries	1	2	3	4	5	6
Battery total energy[1]	5.12kWh	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh
Usable Energy[2]	4.75kWh	9.5kWh	14.25kWh	19kWh	23.75kWh	28.5kWh
Degree of protection	IP65					
Ambient temperature range[3]	-10 C ~+50 C					
Allowable relative humidity range	5%-95%					
Max. operating altitude[4]	4000m					
Weight	74.5kg	125.5kg	176.5kg	228.5kg	279.5kg	330.5kg
Dimension (W*H*D)	708*890*170mm	708*1310*170mm	708*1730*170mm	708*1310*170mm 708*900*170mm	708*1310*170mm 708*1320*170mm	708*1730*170mm 708*1320*170mm
Display	LCD & APP+Bluetooth					
Communication	RS485/CAN/WiFi , Optional:Ethernet/4G					
Product ordering model	[ESI 3-6K-S1 Inverter Module] + N * [BTS 5K Battery Module]					

Inverter Module

Model	ESI 5K-S1-A	ESI 6K-S1
Rated battery voltage	400V	
Max. charge/discharge current	20A	
Maximum PV input power	7500Wp	9000Wp
Max. input voltage	550V	
Rated input voltage	360V	
Input start-up	100V	
Min Operating voltage	85V	
MPPT operating voltage range	85-520V	
Number of MPP trackers	2	
Max. input current per MPPT	16A/16A	
Max short circuit current	22.5A/22.5A	
Rated grid voltage	L/N/PE, 230V, 50Hz/60Hz	
Grid voltage range	180Vac-276Vac (According to local standard)	
Rated AC power	5000W	6000W
Rated AC apparent power	5000VA	6600VA
Max. AC apparent power	5000VA	6600VA
Rated output current	21.7A	26A
Rated voltage, Frequency (Off-grid)	230V, 50/60Hz	
Max. apparent power (Off-grid)	5000VA	6000VA
Peak output power, Duration (Off-grid)[5]	7500VA, 10S	9000VA, 10S
Switch time	< 10ms	
Max efficiency of solar inverter	97.80%	97.80%
European efficiency of solar inverter	97.10%	97.10%
Topology	Transformerless	
Dimension (W*H*D)	708*410*170mm	
Weight	22.5kg	

Battery Module

Model	BTS 5K
Battery Type[6]	LFP
Battery module energy[1]	5.12kWh
Depth of discharge (DOD)	0-90% adjustable
Rated Power	2500W
Topology	Transformer isolation
Dimension (W*H*D)	708*420*170mm
Weight	50kg

Standard EN 61000-6-2, EN 61000-6-3, IEC 62109-1/2, IEC 62040-1, UN38.3, IEC62619, AS/NZS 4777

[1] Test conditions: 0.2C charging/discharging at 25°C, 100% DOD [2] Based on the battery cell [3] Please refer to the temperature derating curve
[4] If the altitude is >2000 m, derating is required. Please refer to the derating curve [5] In a system with sufficient PV and battery power [6] Please refer to document "SOFAR Inverter Model compatible battery list"
* All specifications are subject to change without notice.