

# SOFAR POWERALL

3 / 3.68 / 4 / 4.6 / 5 / 6 kW  
5 / 10 / 15 / 20 / 25 / 30 kWh

SINGLE-PHASE DUAL MPPT



## Product advantages

- Stacking integrated design, easy installation
- Supports mixing old and new batteries, simple maintenance
- Built-in PCU, battery available energy increased by 6%
- Maximum 16A PV input current, compatible with high-current/ bifacial modules
- Battery with physical and electrical isolation, safer system



Model	ESI 3-6K-S1-HA1	ESI 3-6K-S1-HA2	ESI 3-6K-S1-HA3	ESI 3-6K-S1-HA4	ESI 3-6K-S1-HA5	ESI 3-6K-S1-HA6	
<b>System Parameters</b>							
System Schematic							
Inverter Module	ESI 3-6K-S1						
Qty.of Inverter Modules	1						
Battery Module	BTS 5K						
Qty.of Battery Modules	1	2	3	4	5	6	
Battery total energy <sup>[1]</sup>	5.12kWh	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh	
IP Rating	IP65						
Operating temperature <sup>[2]</sup>	Charge: 0°C - +50°C / Discharge: -10°C - +50°C						
Allowable relative humidity range	5%-95%						
Max. operating altitude <sup>[3]</sup>	4000 m						
Weight	74.5kg	125.5kg	176.5kg	228.5kg	279.5kg	330.5kg	
Dimension (W*H*D) <sup>[4]</sup>	708*830*170mm	708*1250*170mm	708*1670*170mm	708*1250*170mm 708*840*170mm	708*1250*170mm 708*1260*170mm	708*1670*170mm 708*1260*170mm	
Base Dimension (W*H*D)	620*60*170 mm (floor installation), 620*310*170 mm (wall-mounted installation)						
Display	LCD & APP						
Communication	RS485/CAN/Wi-Fi. Optional: Ethernet/4G						
Product ordering model	[ESI 3-6K-S1 Inverter Module] + N * [BTS 5K Battery Module]						
Inverter Module	ESI 3K-S1	ESI 3.68K-S1	ESI 4K-S1	ESI 4.6K-S1	ESI 5K-S1	ESI 5K-S1-A*	ESI 6K-S1
<b>PV Input</b>							
Recommended Max. PV Power	4500Wp	5400Wp	6000Wp	6900Wp	7500Wp	7500Wp	9000Wp
Max. Input Voltage	550 Vd.c.						
Start-up Voltage	100 Vd.c.						
Rated Input Voltage	360 Vd.c.						
MPPT Voltage Range	85-520 Vd.c.						
Number of MPPT Trackers	1/1						
Max. Input Current	16/16 A						
Max. Isc	22.5/22.5 A						
<b>Battery</b>							
Rated Voltage Range	400 Vd.c.						
Max. charging/discharging current	20 A						
<b>AC Input(Grid)</b>							
Rated Input Voltage	L+N+PE, 230 V.a.c.						
Rated Input Frequency	50/60 Hz						
Max. Input Current	26.1 A	32.0 A	34.8 A	40.0 A	43.5 A	43.5 A	52.2 A
<b>AC Output(Backup)</b>							
Rated Output Voltage	L+N+PE, 230 V.a.c.						
Rated Output Frequency	50/60 Hz						
Rated Output Power	3 kW	3.68 kW	4 kW	4.6 kW	5 kW	5 kW	6 kW
Max. Apparent Power	3 kVA	3.68 kVA	4 kVA	4.6 kVA	5 kVA	5 kVA	6 kVA
Peak Output Apparent Power	4500VA, 60s	5520VA, 60s	6000VA, 60s	6900VA, 60s	7500VA, 60s	7500VA, 60s	9000VA, 60s
Switching time	10ms, default						
Dimension (W*H*D)	708*410*170mm						
Weight	22.5kg						
<b>Battery Module</b>							
Battery Module	BTS 5K						
Battery Type	LFP						
Battery module energy	5.12kWh						
Rated Power	2500W						
Topology	Transformer isolation						
Dimension (W*H*D)	708*420*170mm						
Weight	50kg						

[1] Test conditions:0.2C charging/discharging at 25°C,100%DOD. [2] Please refer to the temperature derating curve.  
[3] If the altitude is >2000 m, derating is required. Please refer to the derating curve. [4] Dimensions of the inverter and batteries.  
\* All specifications are subject to change without notice.