

PowerAll

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

Single-phase all-in-one ESS



► SOFAR Hybrid inverter

► SOFAR Battery



User-friendly

- Easy installation & extendable capacity
- User-friendly one-button battery operation
- Extendable by mixing new and existing batteries



Flexible application

- Multi-function EMS integrated
- Seamless switchover between on and off-grid (10ms)



Safe & Reliable

- IP65 rated design
- Physically & electrically isolated battery, safer system

Model						
System Parameters						
System Schematic						
Inverter Module	ESI 3/3.68 /4/4.6/5/6K-S1					
Number of Inverter Modules	1					
Battery Module	BTS 5K					
Number of Battery Modules	1	2	3	4	5	6
Battery Total Energy ^[1]	5.12 kWh	10.24 kWh	15.36 kWh	20.48 kWh	25.6 kWh	30.72 kWh
IP Rating	IP65					
Operating Temperature ^[2]	Charge: 0°C to +50°C / Discharge: -10°C to +50°C					
Allowable Relative Humidity Range	5-95%					
Max. Operating Altitude ^[3]	4000 m					
Weight	74.5 kg	125.5 kg	176.5 kg	228.5 kg	279.5 kg	330.5 kg
Dimension (W×H×D) ^[4]	708×830×170 mm	708×1250×170 mm	708×1670×170 mm	708×1250×170 mm 708×840×170 mm	708×1250×170 mm 708×1260×170 mm	708×1670×170 mm 708×1260×170 mm
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 3/3.68 /4/4.6/5/6K-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 6K-S1
PV Input						
Recommended Max. PV Power	4500Wp	5400Wp	6000Wp	6900Wp	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	2					
Max. Input Current	16/16 A					
Max. Isc	22.5/22.5 A					
Battery						
Rated Voltage Range	350-435 Vd.c.					
Max. Charging/Discharging Current	20 A					
AC Backup						
Rated Output Voltage	L+N+PE, 220/230/240 Va.c.					
Rated Output Frequency	50/60 Hz					
Rated Output Power	3 kW	3.68 kW	4 kW	4.6 kW	5 kW	6 kW
Max. Apparent Power	3 kVA	3.68 kVA	4 kVA	4.6 kVA	5 kVA	6 kVA
Peak Output Apparent Power	4500VA, 60s	5520VA, 60s	6000VA, 60s	6900VA, 60s	7500VA, 60s	9000VA, 60s
Switching Time	10 ms default					
AC Grid						
Rated Voltage	L+N+PE, 220/230/240 Va.c.					
Rated Frequency	50/60 Hz					
Rated Output Power	3 kVA	3.68 kVA	4 kVA	4.6 kVA	5 kVA	6 kVA
Max. Apparent Power	3.3 kVA	3.68 kVA	4.4 kVA	4.6 kVA	5.5 kVA	6.6 kVA
Max. Output Current	15.0/14.3/13.8 A	16.7/16.0/15.3 A	20.0/19.1/18.3 A	20.9/20.0/19.2 A	25.0/23.9/22.9 A	30.0/28.7/27.5 A
Max. Input Current	27.3/26.1/25.0 A	33.5/32.0/30.7 A	36.4/34.8/33.3 A	41.8/40.0/38.3 A	45.5/43.5/41.7 A	54.5/52.2/50.0 A
Power Factor Range	0.8 lagging-0.8 leading					
General Parameter						
Dimensions (W×H×D)/Weight	708×410×170 mm/26 kg					
Battery Module						
Battery Type	LiFePO ₄ - lithium iron phosphate battery					
Battery Module Energy	5.12 kWh					
Rated Power	2.5 kW					
Topology	Isolation					
Dimensions (W×H×D)/Weight	708×420×170 mm/50 kg					

[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.