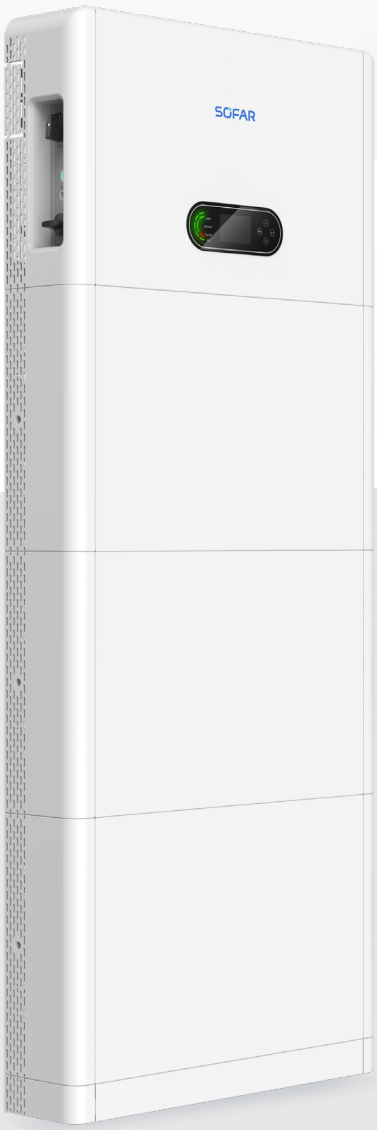
PowerAll

5 / 6.5 / 8 / 9.9 / 10 / 12 kW
5 / 10 / 15 / 20 / 25 / 30 kWh

Three-phase All-in-one ESS



- SOFAR Hybrid inverter
- SOFAR Battery

We've GOT YOU COVERED with CGL insurance.

User-friendly

- Easy installation & extendable capacity
- Natural heat dissipation, no extra noise

Flexible applications

- Supports 100% three-phase unbalanced loads
- Seamless switchover between on and off-grid (10ms)

Safe & Reliable

- Up to 3 MPPTs with AFCI
- IP66 rated design

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System Parameters						
System Schematic						
Inverter Module	ESI-5/6.5/8/9.9/10/12K-T1					
Number of Inverter Modules	1					
Battery Module	BTS 5K					
Number of Battery Modules	1	2	3	4	5	6
Battery Total Energy [1]	5.12kWh	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh
IP Rating	IP65					
Operating Temperature Range [2]	Charge: -10°C ~ +50°C / Discharge: -20°C ~ +50°C					
Relative Humidity Range	5%-95%					
Max. Operating Altitude [3]	4000m					
Weight	80kg	130kg	180kg	230kg	280kg	330kg
Dimension (W×H×D) [4]	708×920×170mm	708×1340×170mm	708×1760×170mm	708×1340×170mm 708×940×170mm	708×1340×170mm 708×1360×170mm	708×1760×170mm 708×1360×170mm
Base Dimensions (W×H×D)	620×60×170mm (floor installation), 620×310×170mm (wall-mounted installation)					
Display	LCD & APP					
Communication	CAN/RS485/WiFi, Optional: 4G/LAN					
Product Ordering Model	[ESI-5/6.5/8/9.9/10/12K-T1 Inverter Module] + N * [BTS 5K Battery Module]					
Inverter Module	**ESI-5K-T1**	**ESI-6.5K-T1**	**ESI-8K-T1**	**ESI-9.9K-T1-A**	**ESI-10K-T1**	**ESI-12K-T1**
PV Input						
Recommended Max. PV Power	10kWp	13kWp	16kWp	20kWp	20kWp	24kWp
Max. Input Voltage	1000Vd.c.					
Start-up Voltage [5]	200Vd.c.					
Rated Input Voltage	600Vd.c.					
MPP Voltage Range	160-950Vd.c.					
Number of MPPT	3					
Max. Input Current	20/20/20A					
Max. Isc	25/25/25A					
Battery						
Voltage Range	3N~+PE, 380/400/415Va.c.					
Max. Charging Current	25A					
Max. Discharging Current	15A	19.5A	24A	29.7A	30A	30A
AC Backup						
Rated Output Voltage	3N~+PE, 380/400/415Va.c.					
Rated Output Frequency	50/60Hz					
Rated Output Power	5kW	6.5kW	8kW	9.9kW	10kW	12kW
Max. Apparent Power	5.5kVA	7.15kVA	8.8kVA	9.9kVA	11kVA	13.2kVA
Peak Output Apparent Power [6]	2 times of rated power, 10s					
Switching Time	10ms default					
AC Grid						
Rated Voltage	3(N)~+PE, 380/400/415Va.c.					
Rated Frequency	50/60Hz					
Rated Output Power	6.5kW	6.5kW	8kW	9.9kW	10kW	12kW
Max. Apparent Power	7.15kVA	7.15kVA	8.8kVA	9.9kVA	11kVA	13.2kVA
Max. Output Current	8.3/8.0/7.6A	10.9/10.3/9.9A	13.3/12.8/12.2A	15.0/14.3/13.8A	16.7/15.9/15.3A	20.0/19.1/18.3A
Max. Input Current	15.2/14.5/13.9A	19.8/18.8/18.1A	24.2/23.2/22.2A	30.3/29.0/27.8A	30.3/29.0/27.8A	33.3/31.9/30.6A
Power Factor Range	0.8 lagging - 0.8 leading					
General Parameter						
Dimensions (W×H×D) / Weight	708×440×170mm / 30kg					
Battery Module	**BTS 5K**					
Battery Type	$LiFePO_4$ - lithium iron phosphate battery					
Battery Module Energy [1]	5.12kWh					
Rated Power	2.5kW					
Topology	Isolation					
Dimensions (W×H×D) / Weight	708×420×170mm / 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. [5] Minimum PV voltage to start MPPT operation. [6] Full battery and sun.

*All specifications are subject to change without notice.