

ESI 3-6K-S1

3 / 3.68 / 4 / 4.6 / 5 / 6 kW

SINGLE-PHASE STACKED ALL-IN-ONE SYSTEM



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



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 Trackers	1/1					
Max. Input Current	16/16 A					
Max. Isc	22.5/22.5 A					
Battery						
Rated Voltage Range	400 Vd.c.					
Max. Charging/Discharging Current	20 A					
AC Input(Grid)						
Rated Input Voltage	L+N+PE,220/230/240 Va.c.					
Rated Input Frequency	50/60 Hz					
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
AC Output(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					
Dimension (W*H*D)	708*410*170 mm					
Weight	22.5 kg					
Battery Module	BTS 5K					
Battery Type	LFP					
Battery Module Energy	5.12 kWh					
Rated Power	2.5 kW					
Topology	Isolation					
Dimension (W*H*D)	708*420*170 mm					
Weight	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.