

ESI 3-6K-S1 (PowerAll)

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



Model	ESI 3/3.68/4/4.6/5/6K-S1-HA1	ESI 3/3.68/4/4.6/5/6K-S1-HA2	ESI 3/3.68/4/4.6/5/6K-S1-HA3	ESI 3/3.68/4/4.6/5/6K-S1-HA4	ESI 3/3.68/4/4.6/5/6K-S1-HA5	ESI 3/3.68/4/4.6/5/6K-S1-HA6	
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 5K-S1-A	ESI 6K-S1
PV Input							
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						
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	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	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	10 ms default						
Dimension (W*H*D)	708*410*170 mm						
Weight	22.5 kg						
Battery Module							
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.