

S5-EH1P(3-6)K-L-UN

Solis Flexi-ONE



Solis Flexi-ONE Midi

S5-EH1P
3K / 3.6K / 4.6K / 5K / 6K
-L-UN

Solis Flexi-ONE Maxi

S5-EH1P
3K / 3.6K / 4.6K / 5K / 6K
-L-UN-EX

Solis Flexi-ONE Expansion Box

S5-EH-UN-EX



Uniquely Flexible

- ▶ Choose your own batteries from compatible manufacturers
- ▶ Quick installation
- ▶ Compatible battery capacity up to 20kW·h
- ▶ Built-in distribution block, removing inverter core without affecting backup loads



High performance

- ▶ 20ms switching time between on-grid mode and off-grid mode
- ▶ Grid output power up to 6kW
- ▶ Charge/Discharge current up to 100A
- ▶ PV input power up to 8kW, PV input current up to 15A
- ▶ 5kW backup power to support more important loads
- ▶ AC input current up to 32A, support backup load running and battery charging at the same time



Intelligent Integration

- ▶ Integrated backup bypass switch
- ▶ Integrated AFCI
- ▶ Integrated PV, grid and battery switches
- ▶ Dual protection with fuse and isolator



Multiple functions

- ▶ Integrated bluetooth supports APP commissioning
- ▶ Multiple working modes to maximize self-consumption
- ▶ Intelligent EMS function
- ▶ 24-hour energy management via SolisCloud
- ▶ Remote control & firmware upgrade

Datasheet

Model Name	S5-EH1P3K -L-UN	S5-EH1P3.6K -L-UN	S5-EH1P4.6K -L-UN	S5-EH1P5K -L-UN	S5-EH1P6K -L-UN	S5-EH1P3K -L-UN-EX	S5-EH1P3.6K -L-UN-EX	S5-EH1P4.6K -L-UN-EX	S5-EH1P5K -L-UN-EX	S5-EH1P6K -L-UN-EX
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Battery Compatibility (to be continued)

Nominal capacity range	2.4-12 kW-h					9.6-20 kW-h				
Pylontech US2000	1-3 pcs, 2.4 kW-h / 4.8 kW-h / 7.2 kW-h					4-6 pcs, 9.6 kW-h / 12 kW-h / 14.4 kW-h				
Pylontech US3000	1-2 pcs, 3.55 kW-h / 7.1 kW-h					3-4 pcs, 10.65 kW-h / 14.2 kW-h				
UZ energy L051100-A	1-2 pcs, 5.0 kW-h / 10 kW-h					3-4 pcs, 15.0 kW-h / 20 kW-h				
Dyness B4850	1-3 pcs, 2.4 kW-h / 4.8 kW-h / 7.2 kW-h					4-6 pcs, 9.6 kW-h / 12 kW-h / 14.4 kW-h				
LG Chem RESU 6.5	1 pcs, 6.5 kW-h					/				
LG Chem RESU 10	1 pcs, 10 kW-h					/				

Input DC (PV side)

Recommended max. PV power	4.8 kW	5.7 kW	8 kW			4.8 kW	5.7 kW	8 kW		
Max. input voltage						600 V				
Rated voltage						330 V				
Start-up voltage						120 V				
MPPT voltage range						90-520 V				
Max. input current						15 A / 15 A				
Max. short circuit current						22.5 A / 22.5 A				
MPPT number/Max. input strings number						2/2				

Battery Charging/Discharging

Battery voltage range	42-58 V											
Max. charge/discharge power	3 kW			5 kW			3 kW			5 kW		
Max. charge/discharge current	62.5 A			100 A			62.5 A			100 A		
Communication	CAN											

Output AC (Back-up)

Rated output power	3 kW		3.6 kW		5 kW			3 kW		3.6 kW		5 kW		
Max. apparent output power	4.5 kVA, 10 s		5.4 kVA, 10 s		7 kVA, 10 s			4.5 kVA, 10 s		5.4 kVA, 10 s		7 kVA, 10 s		
Back-up switch time	<20 ms													
Rated output voltage	1/N/PE, 220 V / 230 V													
Rated frequency	50 Hz / 60 Hz													
Rated output current	13.7 A / 13.1 A		16.3 A / 15.7 A		22.8 A / 21.7 A			13.7 A / 13.1 A		16.3 A / 15.7 A		22.8 A / 21.7 A		
THDv (@linear load)	<2%													

Output AC (Grid side)

Rated output power	3 kW		3.6 kW		4.6 kW		5 kW		6 kW		3 kW		3.6 kW		4.6 kW		5 kW		6 kW	
Max. apparent output power	3.3 kVA		4 kVA		4.6 kVA		5.5 kVA		6.6 kVA		3.3 kVA		4 kVA		4.6 kVA		5.5 kVA		6.6 kVA	
Rated grid voltage	1/N/PE, 220 V / 230 V																			
Rated grid frequency	50 Hz / 60 Hz																			
Rated grid output current	13.7 A / 13.1 A		16.4 A / 15.7 A		20.9 A / 20.0 A		22.8 A / 21.7 A		27.3 A / 26.1 A		13.7 A / 13.1 A		16.4 A / 15.7 A		20.9 A / 20.0 A		22.8 A / 21.7 A		27.3 A / 26.1 A	
Max. output current	15 A		18.2 A		21.0 A		25.0 A		27.3 A		15 A		18.2 A		21.0 A		25.0 A		27.3 A	
Power Factor	>0.99 (0.8 leading - 0.8 lagging)																			
THDi	<2%																			

General Data

Dimensions (H*W*D)	1146*691*375 mm					1786*691*375 mm				
Weight (without battery)	46 kg					58.3 kg				
Topology	High frequency isolation (for battery)									
Operating ambient temperature range	-20 ~ +60°C (INV), system based on battery specification									
Ingress protection	IP54									
Cooling concept	Intelligent redundant fan-cooling									
Max. operation altitude	3000 m									
Grid connection standard	AS/NZS 4777.2:2020									
Safety/EMC standard	IEC62109-1/-2, EN61000-6-2, EN61000-6-3									

Model Name	All series
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Input AC (Grid side)

Input voltage range	187-265 V
Max. input current	32 A
Frequency range	45-55 Hz / 55-65 Hz

Protection

Ground fault monitoring	Yes
Residual current monitoring	Yes
Integrated AFCI (DC arc-fault circuit protection)	Yes ⁽¹⁾
DC reverse polarity protection	Yes
Protection class	CLASS I
Over voltage category	II (PV), III (MAINS)
Intelligent temperature protection	Yes

Model Name	All series
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Efficiency

Max. efficiency	97.5%
EU efficiency	96.8%
MPPT efficiency	>99.9%

Features

DC connection	MC4 connector
AC connection	Quick connection plug
Display	LED
Communication	COM, DRM, RS485, dry contact, Bluetooth (internal)

(1) Activation required.