



zeroCO₂[®] small

3-6 kW

Single-phase Hybrid Inverter for Storage

Features:

- Color LCD graphic display;
- Automatic management of energy flows from photovoltaic, battery and grid;
- Energy meter included, can be installed on the exchange and on loads;
- Powerful 100 A battery charger for the 4.6 - 5 and 6 kW models;
- Equipped for the EPS function in case of grid blackout with power up to 5 kW (optional);
- Possibility of “zero grid entry” function;
- Possibility of retrofit installation;
- Suitable for energy communities;
- IP65;
- Wi-Fi monitoring included;
- Compatible with Pylontech and LG Chem low voltage batteries;
- 10 year warranty with remote monitoring connected.

Models:

S5-EH1P3K-L S5-EH1P3.6K-L
S5-EH1P4.6K-L S5-EH1P5K-L
S5-EH1P6K-L

Dimensions:

Height: 505 mm
Width: 333 mm
Depth: 249 mm
Weight: 17 kg



ANNOUNCEMENTS!

“INPUT CURRENTS UP TO 15A TO MANAGE THE
NEW GENERATION PHOTOVOLTAIC MODULES”



energy[®]

SAVE YOUR PLANET

www.energysynt.com

Model	S5-EH1P3K-L	S5-EH1P3.6K-L	S5-EH1P4.6K-L	S5-EH1P5K-L	S5-EH1P6K-L
INPUT DC (PV SIDE)					
Max. DC input power [kW]	4.8	5.7		8	
The max DC input voltage [V]			600		
Nominal DC voltage [V]			330		
Start-up DC voltage [V]			120		
MPPT operating voltage range [V]			90-520		
Full load MPPT voltage range [V]	100-520			120-520	
MPPT number/Max. Input strings number			2/2		
Max. Input current [A/B]			15.0A/15.0A		
Max. Short circuit current for each MPPT			22.5A/22.5A		
Return current from inverter to strings			0A		
BATTERY					
Battery type			Li-ion		
Battery voltage range [V]			42 - 58		
Battery capacity [Ah]			50-2000		
Max. Charging power [kW]	3			5	
Max. Charge/discharge current [A]	62.5A			100A	
OUTPUT AC (BACK-UP)					
Rated output power [kW]	3			5	
Max. Apparent output power [kVA]	4.5 kVA, 10SEC			7.5 kVA, 10SEC	
Back-up switch time [ms]			<20		
Rated output voltage and frequency [V-Hz]			220/230V - 50/60Hz		
Rated output current [A]	14 A / 13.5 A			23 A / 22 A	
THDi			2%		
INPUT AC (GRID SIDE)					
Range AC [V]			187-265 V		
Max. output current [A]	20.5 A / 20 A	25 A / 23.5 A	31.5 A / 30 A	34.5 A / 33 A	34.5 A / 33 A
Frequency range [Hz]			50/60Hz		
EFFICIENCY					
Max efficiency of Inverter			>97.5%		
European efficiency of Inverter			>96.8%		
OUTPUT AC (GRID SIDE)					
Rated output power [kW]	3	3.6	4.6	5	6
Max. apparent output power [kVA]	3.3	4	4.6	5.5	6
Rated grid voltage and frequency [V-Hz]			220/230V - 50/60Hz		
Rated grid output current [A]	13.7 A / 13.1 A	16.4 A / 15.7 A	20.9 A / 20 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Max. output current [A]	15 A / 14.5 A	18.5 A / 17.5 A	21 A / 20 A	25 A / 24 A	30 A / 29 A
Power Factor			>0.99 (0.8 leading ... 0.8 lagging)		
THDi			<2%		
PROTECTION					
Ground fault monitoring			Yes		
Residual current monitoring unit			Yes		
Integrated DC AFCI			Yes		
DC reverse-polarity protection			Yes		
Protection class / Over voltage category			I/II		
GENERAL DATA					
Dimension [WxHxD] [mm]			333x505x249		
Weight [kg]			17		
Topology			High frequency isolation (for battery)		
Operation temperature range [°C]			-25°C + 60		
Protection degree			IP65		
Noise emission			<20dB (A)		
Cooling concept			Natural convection		
Max. operation altitude			2000m		
Design lifetime			>20 years		
Grid connection standard	CEI 0-21, EN50438, G83/2, G98, G99, G59/3, AS4777.2:2015, VDE0126-1-1, IEC61727, VDE N4105				
Safety/ EMC Standard	IEC62040-1, IEC62109-1/-2, AS3100, NB/T 32004, EN61000-6-1, EN61000-6-3				
AC and DC Connections			Quick Connector / MC4 connector		
Display			7.0"LCD color screen display		
Communication			CAN/RS485/WiFi/GPRS optional		
Warranty			5 years (10 years if monitoring)		

The information in this brochure are not binding. Energy Srl reserves the right to make changes at any time without notice.

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