



# zeroCO<sub>2</sub><sup>®</sup> small

## 3-6 kW

### Single-phase Hybrid Inverter for Storage

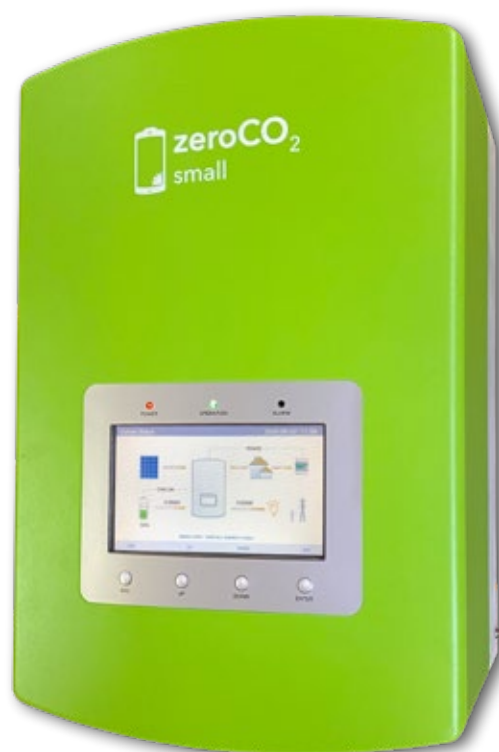
FOR NEW GENERATION PV PANELS (LONG STRING)

#### Features:

- Color LCD graphic display;
- Input currents up to 15A to manage the new generation photovoltaic modules;
- 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;
- Protection degree IP65;
- Wi-Fi monitoring included;
- Compatible with Pylontech and LG Chem low voltage batteries;
- 5-year warranty extendable to 10 years with “Energy Care”.

#### Dimensions:

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



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Model	S5-EH1P3K-L	S5-EH1P3.6K-L	S5-EH1P4.6K-L	S5-EH1P5K-L	S5-EH1P6K-L
Order Code	90050875	90050880	90050885	90050890	90050895
<b>INPUT DC (PV SIDE)</b>					
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]			15.0/15.0		
Max. Short circuit current for each MPPT			22.5/22.5		
Return current from inverter to strings			0		
<b>BATTERY</b>					
Battery voltage range [V]			42-58		
Battery capacity [Ah]			50-2000		
Max. Charging power [kW]	3			5	
Max. Charge/discharge current [A]	62.5			100	
<b>OUTPUT AC (BACK-UP)</b>					
Rated output power [kW]	3			5	
Max. Apparent output power [kVA @10sec]	4.5			7.5	
Back-up switch time [ms]			<20		
Rated output voltage and frequency [V-Hz]			220/230-50/60		
Rated output current [A]	14/13.5			23/22	
THDi [%]			2		
<b>INPUT AC (GRID SIDE)</b>					
Range AC [V]			187-265		
Max. output current [A]	20.5/20	25/23.5	31.5/30	34.5/33	34.5/33
Frequency range [Hz]			50/60		
<b>EFFICIENCY</b>					
Max efficiency of Inverter [%]			>97.5		
European efficiency of Inverter [%]			>96.8		
<b>OUTPUT AC (GRID SIDE)</b>					
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]			220/230-50/60		
Rated grid output current [A]	13.7/13.1	16.4/15.7	20.9/20	22.8/21.7	27.3/26.1
Max. output current [A]	15/14.5	18.5/17.5	21/20	25/24	30/29
Power Factor			>0.99 (0.8 leading ... 0.8 lagging)		
THDi [%]			<2		
<b>PROTECTION</b>					
Ground fault monitoring, Residual current monitoring unit, Integrated DC AFCI, DC reverse-polarity protection					
Protection class / Over voltage category	I/II				
<b>GENERAL DATA</b>					
Dimension [WxHxD] [mm]	333x505x249				
Weight [kg]	17				
Topology	High frequency isolation (for battery)				
Operation temperature range [°C]	-25° + 60				
Protection degree	IP65				
Noise emission [db]	<20 (A)				
Cooling concept	Natural convection				
Max. operation altitude [m]	2000				
Design lifetime [years]	>20				
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 [years]	5 (*)				

(\*) extendable to 10 years with "Energy Care", order code 99990045

## Energy S.p.A.

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