

# zeroCO<sub>2</sub> - XL Shell 100

## Solution

zeroCO<sub>2</sub> - XL SHELL 100 is a plug & play system for managing, converting and exploiting energy in systems with high power requirements.

The size of the storage allows deferred use of all the accumulated energy for several hours.

Integrated EMS to maximize self-consumption and allow peak shaving.

- Compact design for outdoor installation 60kW / 109-127 kWh;
- All in one LFP Pylontech H32148C batteries;
- Triple section bearing structure in polyester powder coated galvanized sheet;
- Degree of protection IP54;
- HVAC system to maintain optimum operating temperatures and promote design life.
- DC and AC circuit breakers and magnetic switch included;
- Batteries installed and factory pre-wired electrical panel up to the user side interfaces;
- AC 400V 3Ph +N + PE type power supply for On-Grid systems;
- Suitable for Ex Novo or Retrofit systems;
- Management of diversified, renewable or non-renewable sources (such as generators);

## Dimensions:

Width:: 1610 mm

Height: 2305 mm

Depht: 1010 mm



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SAVE YOUR PLANET

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<b>zeroCO<sub>2</sub> - XL SHELL 100</b>		<b>60K</b>
Order code	90110760 (*)	
Dimensions [WxHxD, mm]	1610x2305x1010	
Weight [kg]	2900	
Sound power [dB]	<79	
Sound pressure [dB(A)]	<65 (**)	
PCS technology	Trasformerless	
<b>AC PARAMETERS</b>		
Rated / apparent power [kW/kVA]	60 / 66	
AC input type	5 wire (3Ph + N + PE)	
Number and maximum connection cable section per phase [mmq]	1 x 10/35 (L1, L2, L3, N, PE) screw connection	
Voltage range [V]	400 (±10%)	
Rated / max electric current [A]	±89 / 100	
Frequency [Hz]	50/60	
Power factor	0,8 ~ 1 (Leading / Lagging)	
Current DC component [%]	≤ 0,5	
Harmonic content THDi [%]	≤ 3	
AC and DC start function	yes	
Current switching time [ms]	≤ 10	
Conversion efficiency [%]	≥ 97	
Standby power consumption [W]	<1000	
Permissible short-circuit current of short duration [kA]	6	
<b>DC PARAMETERS</b>		
Rated power [kW]	60	
Voltage range [V]	680 - 1000	
Rated/Max electric current [A]	±72 / ±88	
Voltage and current measurement accuracy [%]	±1	
Current / Voltage limiting characteristic	yes	
<b>ENERGY STORAGE</b>		
Battery module	H32148-C	
Controller BMS	SC1000-200J-C	
Battery module quantity [N]	23 ~ 27	
Efficiency [%]	95	
System rated voltage [V]	32 x N	
Charge/discharge system voltage range [V]	680 ~ (36 x N)	
Rated/usable capacity [kWh]	N x 4.74 ~ N x 4.27	
Depth of discharge DOD [%]	90% (8 - 98% SOC)	
<b>AMBIENT CONDITIONS</b>		
Working temperature range [°C]	0 ~ 50 (derating above 45°C)	
Working humidity range [RH%]	<95 (without condensation)	
Storage temperature range [°C]	-20 ~ +60	
Storage humidity range [RH%]	0 ~ 95 (without condensation)	
PCS cooling	Forced convection (fan with smart regulation to reduce consumption and noise)	
System cooling	Air cooled monoblock unit	
Altitude	<3000	
<b>COMMUNICATION</b>		
Communication interfaces	RS485, LAN, WAN, CAN, ModBus RTU, TCP/IP	
<b>SAFETY</b>		
Degree protection	IP54	
EMC features	2014/35/CE Low Voltage Directive - 2014/30/CE Electromagnetic compatibility	
MTBF [h]	100000	
Compliance with connection standards	CEI 0-21, CEI 0-16	
Warranty [years]	2	
Design Life [years]	15+	
LFP Batteries transport certificate	UN38.3 / ADR	

(\*) Order code refers to XL SHELL 100 with 23 battery modules. Please refer to the accessories table to order additional battery modules  
(\*\*) Sound pressure level referred to a 2m distance from the device and air conditioning unit running at full speed

<b>ACCESSORIES</b>	<b>Order Code</b>
Battery module H32148-C	90040280
Fire alarm system	90900754
Eastron three-phase meter kit with external CT 200A/5A	90900315
Eastron three-phase meter kit without CT	90900305

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