

# RACK M1-22

## Solution:

zeroCO<sub>2</sub> - RACK M1-22 is an energy storage system based on high voltage Li-ion (LFP) lithium batteries, to be combined with the zeroCO<sub>2</sub> - XL System. Each rack can hold up to 21 Pylontech H32148-C battery modules, for a nominal storage capacity of 100 kWh. The battery modules are connected in series inside the rack and managed by a BMS controller which monitors their state of charge and safety.

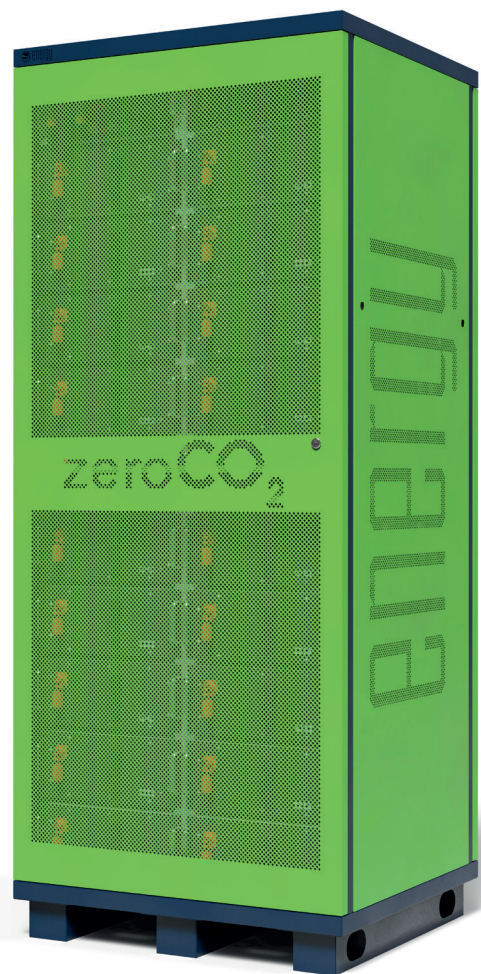
- Battery technology: high voltage Li-ion (LFP);
- Nominal storage capacity of 100 kWh;
- Integrated BMS controller for battery string management;
- Integrated DC protection;
- DC circuit breaker switch included;
- UN 38.3 certification for the transport of lithium batteries;
- Possibility of parallelization of several racks to increase the storage capacity;



SC1000-200J-C



H32148-C



RACK M1-22

## Rack dimensions:

Length: 818 mm

Height: 2013 mm

Depth: 776 mm



SAVE YOUR PLANET

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MODEL	RACK M1-22
Order Code (battery number to configure)	90110035
Order Code (supplied with 21 batteries)	90110040
Dimensions [WxHxD, mm]	818 x 2013 x 776
Weight [kg]	222 + (48 x n)
Cell technology	Li-ion (LFP)
Battery module model	H32148-C
BMS Controller Name	SC1000-200J-C
Charge / discharge test current [A] (*)	29.6
Rated charging / discharging current [A]	74
Max charge / discharge current [A]	148
Nominal module voltage [V]	32
Nominal module capacity [kWh/Ah]	4.74 / 148
Module efficiency [%]	95
<b>DC PARAMETERS</b>	
System rated voltage [V]	32 x n
Max System charge voltage [V]	36 x n
Min System discharge voltage [V]	28.8 x n
Nominal capacity [kWh/Ah]	4.74 x n / 148
DOD discharge depth [%]	90% (8 - 98% SOC)
Usable capacity [kWh/Ah]	4.27 x n / 133
Battery modules quantity [n]	13 ~ 21
<b>COMMUNICATION</b>	
Communication interfaces	CAN, LAN, Modbus RTU, TCP/IP
<b>AMBIENT CONDITIONS</b>	
Working temperature range [°C]	0 ~ 50
Working humidity range [RH%]	0 ~ 95 (without condensation)
Storage temperature range [°C]	-20 ~ 60
Storage humidity range [RH%]	0 ~ 95 (without condensation)
Cooling	Natural cooling
Altitude [m]	<3000
<b>SAFETY</b>	
IP protection rating	IP20
Operational life [years]	15+
Dangerous goods transport certificate	UN38.3

(\*) current value used to determine the capacity of the battery during test.

ACCESSORY	Order Code
BMS SC1000-200J-C (**)	90040281
H32148-C (**)	90040280
Cable kit (**)	90900245
UPS 3 kVA 2U -19" module	90100080
Eastron three-phase meter kit with external CT 200A/5A	90900315
Eastron three-phase meter kit without CT (***)	90900305
Medium voltage meter	90900323

(\*\*) Only for order code 90110035.

(\*\*\*) If the system requires higher current values, it is possible to purchase the meter alone. In this case the choice of CT is left to the customer.

