ZBP 30-45 | 208 / 120 V | 60HZ

Technical specifications

ZenergiZe

General description

Modular energy storage system designed to meet the requirements of applications such as rental, events and telecom. Ideal for any metropolitan job or event. Based in lithium ion batteries, this portable product is ready to supply power, working in island mode or a hybrid solution together with a diesel generator. Giving flexibility to the final product with a list of options such as solar panel connection to increase its sustainability or cold weather kit for the most critical environments. A greener solution for a more efficient performance.

TECHNICAL INFORMATION

Nominal rated power (PF=0,8)	kW / kVA	24 / 30
Nominal energy storage capacity	kWh	46.1
Net energy stored*	kWh	41.5
Rated voltage (60Hz, 3Ø)	VAC	208 / 120
Battery system voltage	VDC	48
Nominal rated current	A	83
Depth of discharge	%	90%
Autonomy at rated power (90%)		1,5 hour
Recharging time (@DoD%)	h	1,8
Parking mode recharging (@DoD%)	h	19,0
Cell chemistry		Lithium Ion phosphate LiFePO4
Operating temperature	°C (°F)	-20** to 50 (-4** to 122)
Dimensions (L x W x H)	mm (in)	1300 x 1160 x 1900 (51.2 x 45.7 x 74.8)
Weight	kg (lb)	1320 (2910)
Sound pressure level @ 1m (3,3 ft)	dB(A)	<70

The standard reference conditions are: 25 °C, 100 kPa and 30% relative humidity. For nominal values efficiencies, deratings and DoD are not considered and tested parameter related to PF=1.

*Due to use this may decrease

**With cold weather heaters switched on

Standard features

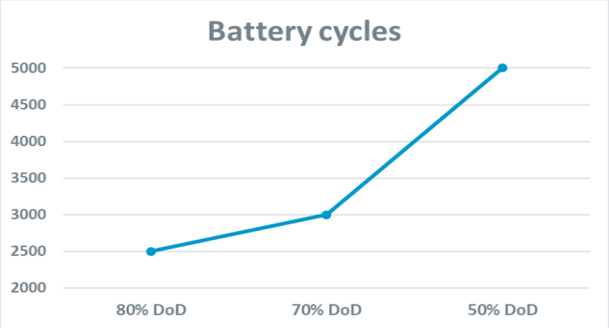
- IN/OUT connections
  - Terminal board, 5 Wire (L1, L2, L3, N, Ground) INLET and 5 Wire (L1, L2, L3, N, Ground) OUTLET
  - Camlocks quick connects
- Parking mode (shore power 20A, 125V inlet connection L5-20P)
- Solar panel easy connections (MPPT Solar Charger + 3 pairs of MC4 PV connectors)
- Remote start/stop 2-wire connection outlet (for communication with generator)
- 6 cooling fans for optimal performance with no derating at higher ambient temperatures
- Cold weather kit (includes four 1000W heaters, to be used while in Parking Mode)
- Telematics with 4G or Wifi
- External emergency stop button
- Galvanized skid
- Earth pin

Batteries

Lithium-iron-phosphate (LiFePO4 or LFP) is the safest of its family. Also does not need to be fully charged to perform correctly. Service life even slightly improves in case of partial charge instead of a full charge. This is a major advantage, in addition, its wide operating temperature range, excellent cycling performance, low internal resistance and high efficiency.
LFP is therefore the chemistry of choice for very demanding applications

Quantity	12	**Efficiency %**	92%
Nominal voltage (V)	12,8	**Min Charge temperature °C (°F)**	-15 (5)
Nominal capacity (Ah) / (Wh)	300 / 3840	**Overcurrent capability**	up to 2 x Nominal current
Maximum DoD %	90%	**End of discharge volt (V)**	11
Cycles	check chart	**IP**	22

Nominal values for standard conditions and performance



Terms:
SOC%: State of Charge, measures the remaining energy content in a battery
SOH%: State of Health, ratio of the recharging capacity, compared to a new battery
DOD%: Depth of discharge, defines the energy consumed in the battery
Cycle: Complete charge and discharge of its usuable energy stored (DoD%)

Inverter

Power electronics that combines inverter and charger. It is needed to transform the energy supply from batteries (DC) to the loads (AC) with or without additional sources as diesel generators or grid.

Quantity	3	**Efficiency %**	96%
Input voltage range (V DC)	38 - 66	**Charger (A)**	140
Individual nominal power (kVA)	10	**Storage mode (Vdc)**	53
Overload capability (kW)	up to 2 x Nominal power	**Current starter battery (A)**	4

Nominal values for standard conditions and performance

Controller

The BMS controller provides intuitive control and monitoring for all batteries and power electronics integrated in the battery pack. A highly customizable start/stop system. Use state of charge, voltage, load and other parameters. Define a special set of rules for quiet times, and optionally a monthly test run. can be connected to internet with an Ethernet cable and via Wi-Fi (as option).

Power supply (V DC)	8 - 70	**Internal data storage capacity (h)**	48
Communication ports	2 x (VE.Direct ports, RJ45, USB)		
Operating temperature °C (°F)	-20 to 50°C (-4 to 122°F)