

Technical specifications

ZBC 1000-1200

Voltage: 400 V

Frequency: 50HZ



Energy storage Container Image for illustration purposes only

General description

The 20 ft container for Energy Storage System is designed to meet the requirements for off and on grid applications. Ideal for renewable power plants. Based in lithium ion batteries, this portable product is ready to supply power in the most demanding situation, working in island mode, hybrid solution together with a diesel generator or in parallel with more ESS.

A greener solution for a more efficient performance.

TECHNICAL INFORMATION

Nominal rated power	kW / kVA	1000
Nominal energy storage capacity	kWh	1228
Net energy stored*	kWh	1105
Rated voltage (50Hz)@3 phase	VAC	3~ 400
Nominal rated AC current	A	1443
Maximum AC Current	A	1587 (<10min)
I _{cw} AC (One PCS)	A	1300
I _{cw} DC (One BMS)	A	62280
Battery system Nominal voltage	VDC	768
Battery Voltage range	VDC	672-864
Battery Max. Charging/Discharging Current (One BMS)	A	800
Cell chemistry		Lithium Iron phosphate LiFePO ₄
Discharging temperature	°C	-20 to 55(>45 derating)
Charging temperature	°C	5 to 55(>45 derating)
Recharging time	h	2
Autonomy at rated power (90%)	h	1.1
Dimensions (L x W x H)	mm	6058*2438*2896
Weight	kg	25000
Sound power level	dB(A)	<86
IP level		IP54
Protection Class		Class I
Power Factor range		(-1,1)
Derating Altitude	m	<3000

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

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Batteries Module

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.

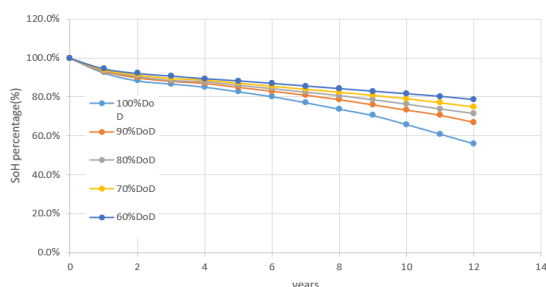
LFP is therefore the chemistry of choice for very demanding applications

Model Name	76.8 NESP 200	C-rate	1 C
Dimension(W×D×H:mm)	400*884*265	Energy density (Wh/kg)	115
Nominal voltage (V)	76.8	Min Charge temperature (°C)*	>0
Nominal capacity (Ah) / (kWh)	200/15.4	Overcurrent capability	1.1x Nominal current for 10 minutes
DoD %	90(recommend)	End of discharge/charge volt (V)	67.2/86.4
Cycles	check chart	Weight (kg)	133.5

*Check Options to improve

Nominal values for standard conditions and performance

The degradation curve vs different DoD @500cycles/year at 25°C



Terms:

SOC%: State of Charge, measures the energy content in a battery

SOH%: State of Health, informs about the remaining initial capacity

DOD%: Depth of discharge, defines the energy consumed in the battery

Cycle: Complete charge and discharge of its usable energy stored (DoD%)

Power Conversion System

Power Conversion System that combines inverter and charger. It can transform the energy supply from batteries (DC) to the loads (AC) with or without additional sources as diesel generators or grid. And Change AC to DC when Charging.

Model Name	P WS1 500K	Efficiency	98%
AC voltage range (V)	400±10%	AC output current	1443
Total nominal power (kW)	500kW	Isolation	External Transformer
Overload capability (kW)	550kW/10 minutes	PCS qty.	2

Nominal values for standard conditions and performance

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