

## Technical specifications

# ZBC250-575

Voltage: 480 V

Frequency: 60HZ



*Energy storage Container Image for illustration purposes only*

## General description

The 10 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	250 / 250
Nominal energy storage capacity	kWh	576
Net energy stored*	kWh	520
Rated voltage (50Hz)	VAC	480
Battery system voltage	VDC	768
Nominal rated AC current	A	301
Max AC current	A	330 (<10min)
Autonomy at rated power	h	2
Minimum Recharging time	h	2.5@100%
Life cycle(70%SOH@90%DoD@25°C)		6000
Cell chemistry		Lithium Iron phosphate LiFePO4
Operating temperature	°F / °C	-4 to 122 / -20 to 50
Dimensions (L x W x H)	ft /mm	9.81 x 8 x 9.5 / 2991 x 2438 x 2896
Weight	lb / kg	24250 / 11000
Sound pressure level@1m	dB(A)	<86

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. \*Net energy is tested at Rating Power condication, and this may variant in different use

## Batteries Module

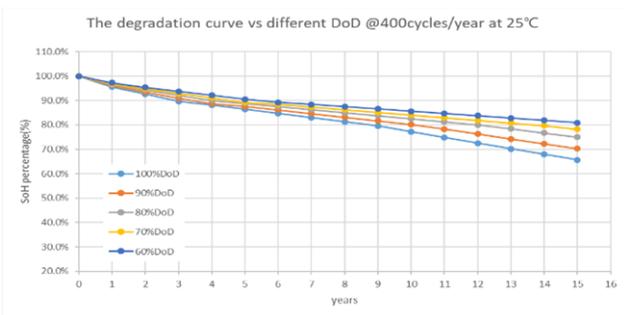
Lithium-iron-phosphate (LiFePO<sub>4</sub> or LFP) is the safest of its family. Also does not need to be fully charged to perform correctly. Service life even slightly improves in case of partial charge instead of a full charge. This is a major advantage in addition, its wide operating temperature range, excellent cycling performance, low internal resistance and high efficiency.

LFP is therefore the chemistry of choice for very demanding applications

<b>Model Name</b>	76.8NESP250	<b>C-rate</b>	0.5C
<b>Dimension WxDxH: (inch / mm)</b>	15.7x34.8x10.43 / 400x884x265	<b>Energy density (Wh/kg)</b>	136
<b>Nominal voltage (V)</b>	76.8	<b>Min Charge temperature (°C)*</b>	0
<b>Nominal capacity (Ah) / (kWh)</b>	250/19.2	<b>Overcurrent capability</b>	up to 1.25 x Nominal current
<b>DoD %</b>	90(recommend)	<b>End of discharge/charge volt (V)</b>	67.2/86.4
<b>Cycles</b>	check chart below	<b>Weight (kg)</b>	141

\*Check Options to improve

Nominal values for standard conditions and performance



### 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.

<b>Model Name</b>	PWS1 250K	<b>Efficiency (%)</b>	96%
<b>AC voltage range (V)</b>	480±10%	<b>AC output current (A)</b>	301 (Max. 331)
<b>Total nominal power (kW)</b>	250	<b>Isolation</b>	External Transformer
<b>Overload capability (kW)</b>	275 (max. 1 min)		

Nominal values for standard conditions and performance