

Technical specifications

ZBC 500-250

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	500
Nominal energy storage capacity	kWh	246
Rated voltage (60Hz)	VAC	480
Battery system voltage	VDC	768
Nominal rated AC current	A	600
Max AC current	A	660 (<10min)
Autonomy at rated power	h	0.44
Minimum Recharging time	h	0.5@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	22250 / 10500
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

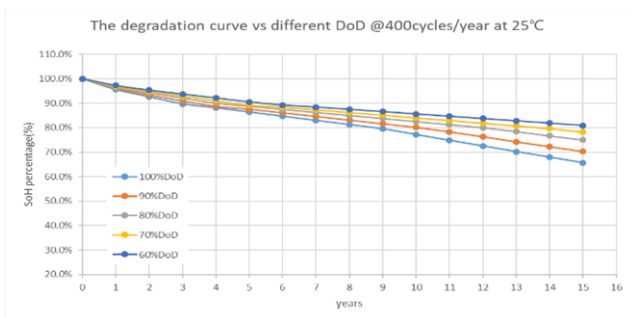
Lithium-iron-phosphate (LiFePO₄ or LFP) is the safest of its family. Also does not need to be fully charged to perform correctly. Service life even slightly improves in case of partial charge instead of a full charge. This is a major advantage in addition, its wide operating temperature range, excellent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

LFP is therefore the chemistry of choice for very demanding applications

Model Name	76.8NESP160	C-rate	2C
Dimension WxDxH: (inch / mm)	15.7x34.8x10.43 / 400x884x265	Energy density (Wh/kg)	111
Nominal voltage (V)	76.8	Min Charge temperature (°C)*	0
Nominal capacity (Ah) / (kWh)	160 / 12.3	Overcurrent capability	up to 1.25 x Nominal current
DoD %	90(recommend)	End of discharge/charge volt (V)	67.2/86.4
Cycles	check chart below	Weight (kg)	110.7

*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

Model Name	PWS1 500KTL NA	Efficiency (%)	96%
AC voltage range (V)	480±10%	AC output current (A)	600 (Max. 331)
Total nominal power (kW)	500	Isolation	Built-in Transformer
Overload capability (kW)	550 (max. 1 min)		

Nominal values for standard conditions and performance