

ZYNAVEX+

NFPP Utility Series Energy Storage Solution

ZXES2300

1.25 MW / 2.3 MWh Liquid-Cooled BESS Container



FEATURES



Utility-Scale Sodium-ion BESS

1.25 MW / 2.3 MWh 20-ft container for grid and renewable applications.



Three-tier BMS Architecture

Multi-level battery control from cell-level sensing to rack-level supervision, with protection and diagnostics.



Container EMS & Liquid Cooling

Integrated control and liquid cooling for safe long-duration operation.



Multi-layer Fire Protection

Pack/cluster/electrical-room protection plus water-spray interface.

Technical Parameter	ZXES2300
DC Parameters	
Cell Specification	2.88V 160Ah
Pack Configuration	1P52S per Pack
String Configuration	1P416S
Number of Racks / Clusters	12 Clusters / 96 Packs
Rated Energy	2.3MWh
Rated Capacity	160Ah
Nominal Voltage	1198V
Operating Voltage	665.6 - 1435.2V
Charge / Discharge Rate	0.5P / 0.5P
AC Parameters	
Rated Output Power	1250kW
Maximum AC Power	1375kW
Apparent Power	1250kVA
Rated Grid Voltage	400Vac, 3P3W+PE
Rated Grid Frequency	50/60Hz
Output Harmonic (THDi)	≤3%
Power Factor	> 0.99
Power Factor Adjustable Range	-1 - +1
DC Voltage Range	660 - 1500V
Max DC Current	1403A
Overload Capacity	1.1 times long-term
System Parameters	
System Type	Liquid-Cooled Containerized System
Battery Chemistry	NFPP Sodium-Ion
Design Life	10 years
Energy Conversion Efficiency	≥90%
Battery Management System (BMS)	Three-Level BMS: BMU + BCU + BAMS
EMS	Included
Fire Suppression System	Four-Layer Automatic Fire Suppression System
Safety & Protection	AC/DC Overvoltage, Undervoltage, Overcurrent, Short-Circuit; PACK-Level + Water-Based Fire Protection; Flammable Gas Monitoring
Communication	Ethernet / CAN / RS485
Parallel Capability	Up to 4 Units + 1 Combiner
Cooling Method	Liquid Cooling
Ingress Protection	IP54
Operation Temperature	-20°C to +60°C
Storage Temperature	-20°C to +40°C
Relative Humidity	0 - 95% RH, Non-Condensing
Working Altitude	≤2000m, Derating Above 2000m
Noise	≤75dB
Dimensions (W x D x H)	2550 x 6058 x 2896mm
Total Weight	≤43000kg
Cycle Life	≥8000 cycles @25°C, 0.5P/0.5P
Compliance & Standards	UN38.3, MSDS; UL9540, GB/T 36547, GB 51048

ZYNAVEX+

General Disclaimer

This document is provided for reference only. Product specifications, performance data, images, and configurations may vary according to operating conditions, application requirements, and continuous product improvement. This document does not constitute any offer, warranty, or commitment. Zynavex Sdn. Bhd. reserves the right to modify product information without prior notice.

Zynavex Sdn. Bhd.

☎ +60 11-6601 8966
🌐 www.zynavex.com
✉ support@zynavex.com

