



UTILITY-SCALE ESS SOLUTION

WS-L5000-BC-2

WS-MV5000-2-A

WS-L5000-BC-2 | The Low LCOS Multi-intelligent Energy Storage Solution

-  **Economical and efficient**
 - 20-foot container 5016kWh
 - Maximum efficiency 94.5%
 - Shoulder-to-shoulder/back-to-back installation
 - Maximum support for 10-year warranty
-  **Flexible and convenient**
 - Liquid cooling circuit equipped with bidirectional shut-off valve
 - Equipped with waste liquid collection device
 - Single/dual circuit output, 2/4h application
-  **Smart Cloud Management**
 - AI-Powered Load Optimization
 - 24/7 Remote Monitoring & O&M
 - Real-Time Battery Health & Safety Alerts
 - Cloud-Connected Ecosystem
-  **Ultimate Safety**
 - 2+3 Level Fire Protection System
 - 3+2+1 Level Electrical Safety Protection

WS-MV5000-2-A | Integrated Boost and Conversion Solution

-  **High-efficiency conversion**
 - Three-level topology with a maximum efficiency of 99%
 - Intelligent air-water cooling with a maximum operating temperature of 60 C
-  **Safe and reliable**
 - IP54/C5 high protection class
 - Online insulation monitoring for safety assurance
 - Interlocks with BMS and EMS to support multiple system protection functions
-  **Grid support**
 - Fast active/reactive power response, supporting source-grid-load-storage dispatching
 - Weak grid support, enabling stable operation with SCR=1.1
 - Equipped with grid-forming functions such as inertia support and microsecond-level voltage building
-  **Flexible application**
 - Supports off-grid parallel operation and independently participates in grid black start
 - Equipped with VSG, VF, PQ and other operating modes
 - Supports application in various scenarios including high altitude, high salt spray, high temperature and extreme low temperature

Liquid-Cooled ESS

Model

WS-L5000-BC-2

Battery Data

Battery Type	LiFePO4
Nominal Capacity (Cell)	314Ah
PACK Configuration	1P104S
RACK Configuration	4*1P104S
System Configuration	2*6P416S (12P416S)
Nominal Voltage	1331.2Vdc (1144-1497.6Vdc)
Nominal Energy	5016kWh (12× 418kWh)
Nominal Current	2*939A
Charge/Discharge Rate	0.5P
DC efficiency	≥94.5%

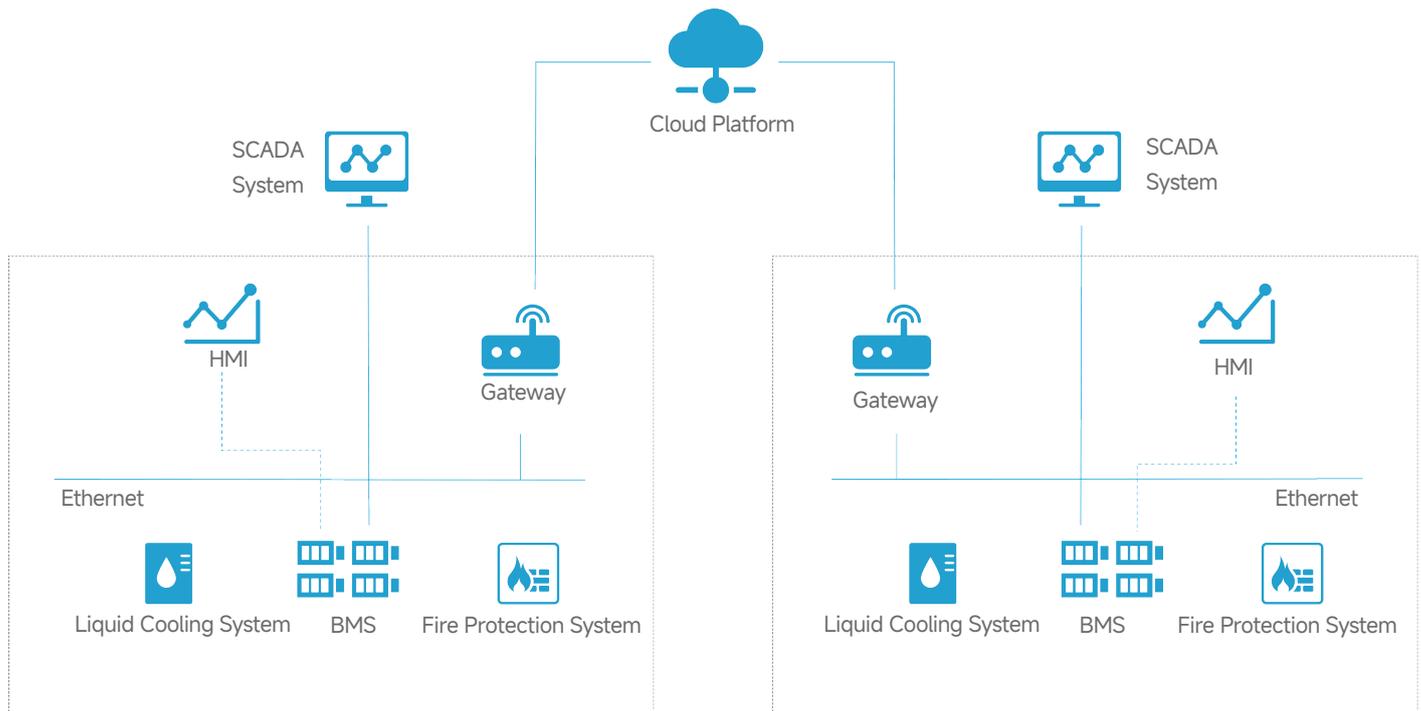
System Data

Operating Temperature	-30°C ~ +55°C (>45°C derating)
Storage Temperature	-30°C ~ +60°C
Humidity	0 ~ 95%RH
Type of cooling BAT	Liquid cooling
Fire Suppression	Aerosol、Water
Ingress Protection	IP55
Anticorrosion grade	C4/C5
Altitude	≤3000m
Weight	≤42T
Dimensions (W × D × H)	6058*2438*2896mm
Communication	Ethernet/CAN

Standard compliance

IEC62619,IEC62477,IEC62933,IEC63056,IEC61000,UN38.3,UN3536,NFPA855,UL9540A

Architecture Diagram



Model	WS-MV5000-2-A
DC Side Data	
Max. DC voltage	1500Vdc
DC voltage range for nominal power	1000Vdc~1500Vdc
Max. DC current	1913A*4
No. of DC inputs	4
PCS AC Side Data	
Rated output power	1250*4 kVA
Max output power	1250*3*4 kVA @35°C
Rated AC voltage	690Vac
AC voltage range	586.5~759Vac (-15%~+10%)
Max AC current	3138*4 A
Nominal grid frequency	50Hz
Grid frequency range	45~55Hz
Power factor range	1 leading ~ 1 lagging
Efficiency	
Average efficiency	≥98.3%
Transformer	
Isolation Mode	Oil-Immersed Transformer
Transformer Rated Power	5250kVA
LV/MV Voltage	0.69kV/20~35kV
Transformer Vector	Dy11
Cooling Type	ONAN
General Data	
Dimensions (W*D*H)	12192×2438×2896mm
Weight	≤40T
Protection degree	IP65 for PCS, IP54 others
Cooling method	Natural air cooling (transformer)/Air-water cooling (PCS)
altitude	3000m(> 2000m derating)
Operating temperature range	-40°C~60°C (>45°C derating)
Humidity range	0~100% (non-condensing)
Anticorrosion grade	C4/C5
Over voltage range	DC OVC II / AC OVC III
Surge protection	DC Type II / AC Type II
Communication	RS485/ETH/CAN
Standard compliance	IEC 62477, IEC 61000, IEC 62920, IEC 61727, IEC 62116, IEC 60076, IEC 62271-100/103/200, EN 50549-2/-10, ANSI C57.12.10/20



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