Midea Industrial Tech.

Aqua-C2.5 Liquid-Cooled System

Excellent Safety

Intelligent management of battery health, early warning of faulty batteries

Active ventilation and explosion venting design to control deflagration risks

Multi-level electrical protection and fire protection design, with arc flash analysis and collaborative protection functions

Excellent Performance

Modular design reduces failure impacts and improves system uptime

Active balancing technology and bionic-inspired solutions enhance battery lifespan and system discharge capacity

IEEE 693 high design level qualification compliance

Optimal costs

Back-to-back and side-by-side design reduces footprint

All pre-assembled, no battery module handling on site

Integrated AC/DC built-in bi-directional inverter, reducing debugging time(for string pcs version)

Smart O&M

Active balancing reduces energy storage station O&M costs

Rapid state detection and fault recording to achieve rapid positioning and analysis of system faults

STRING PCS VERSION

Type Designation	Aqua C2.5S-5015-2500-2h	Aqua-C2.5S-5015-1250-4h
DC-side Parameters		
Cell Type	LFP3.2 V / 314 Ah	
Battery Configuration	416S12P	
Nominal Capacity	5015.9 kWh	
Battery Voltage Range	1123.2~1497.6 V	
Nominal Battery Voltage	1331.2 V	
AC-side Parameters		
Nominal Power	1290kVA *2	1290kVA
Max. THD of Current	< 3 % (Nominal Power)	
DC Component	< 0.5 %	
Nominal Voltage	690 V	
AC Voltage Range	607 V ~759 V	
Nominal Frequency	50 Hz / 60 Hz(IEC) 60Hz(US)	
Termination (LV)	1080 A * 3 Phase * 2	1080 A * 3 Phase
Power Factor	≥ 0.99 (Nominal Power)	
Power Factor Range	- 1 ~ 1	
System Parameters		
Auxiliary Power Supply	400VAC, 50Hz / 60Hz (IEC) 480VAC, 60Hz (US)	
Operation Ambient Temperature Range	-30 ℃ ~ 50 ℃ (> 45 ℃ Derating)	
Relative Humidity	≤ 100% RH (Non-condensing)	
Max. Working Altitude	4000 m	
Protection Grade	Type 3S/IP 55	
Temperature Control Method	Intelligent Liquid cooling	
Noise	≤ 75dB (A)	
Weight	≤ 44000 kg	
Corrosion-proof Grade	C4 C5 (Optional)	
Seismic Level	IEEE 693 Moderate Design Level Qualification IEEE 693 High Design Level Qualification (Optional)	
Snow Load	30 lb /sqft	
Wind Loads	129 mph	
Dimensions (W*H*D)	6058*2896*2438mm	
Fire Suppression System	Fire alarm control panel, Smoke and heat detectors, Alarm bell, Horn strobe, Gas detector, Ventilation system (NFPA 69 compliance), Dry pipes with sprinklers, Aerosol (optional), Deflagration vent panel (optional)	
Communication Interface	Ethernet	
Standard (Europe)	IEC62477-1, IEC62619, IEC61000, IEC62933, IEC63056, EN50549 G99, CEI 0-16, VDE-AR-N 4110, VDE-AR-N 4120, NTS 2.1, NTS SENP 1.1	
Standard (US)	UL 9540A, UL1973, UL9540, UL 1741SB, IEEE 1547 NFPA 855, NFPA 69, NFPA68 (with optional purchase)	

HIGH-VOLTAGE BOX VERSION

Type Designation	Aqua-C2.5H-5015-2500-2h
DC-side Parameters	
Nominal Capacity	5015.9kWh
Nominal Power	2500 kW @ 0 5 CP 1250 kW @ 0.25 CP
Battery Voltage Range	1123.2~1497.6V
Nominal Battery Voltage	1331.2V
Cell Type	LFP 3.2V / 314Ah
System Configuration	1P416S*12
System Parameters	
Auxiliary Power Supply	400VAC, 50Hz / 60Hz (IEC) 480VAC, 60Hz (US)
SOC Calculation Accuracy	≤3 % (After Balancing)
Operation Ambient Temperature Range	-30 ℃ ~ 50 ℃
Relative Humidity	≤100% RH (Non-condensing)
Max. Working Altitude	4000 m
Protection Grade	IP 55/Type 3S
Temperature Control Method	Intelligent Liquid cooling
Noises	≤ 75 dB (A), Standard Version ≤ 65 dB (A) , Silencer Assembly (Optional)
Weight	≤ 42600 kg
Corrosion-proof Grade	C4 C5 (Optional)
Seismic Level	IEEE 693 Moderate Design Level Qualification IEEE 693 High Design Level Qualification (Optional)
Snow Load	30 lb / sqft
Wind Load	129 mph
Dimensions (W*D*H)	6058*2438*2896mm
Fire Suppression System	FACP, Smoke and Heat Detectors, Flammable Gas Detector, Horn strobe, Compliance Ventilation System, Dry Pipes with Sprinklers, Aerosol
Communication Interface	Ethernet
Standard (US)	UL 9540A, UL1973, UL9540, UN 38.3 NFPA 855, NFPA 68, NFPA69 (with optional purchase)
Standard (Europe)	IEC62933-5-2, EN 62477-1, IEC 61000, IEC 62619, IEC 63056, UN38.3/UN3536, CE
Transportation	Fully populated with battery packs

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