



Midea Industrial Tech.



Aqua-C2.5 Liquid-Cooled System

Excellent Safety

- Long fire endurance with TS-800 certification
- Multi-level electrical protection and fire protection design
- Arc-flash and synergistic protection functions

Excellent Stability

- IEEE693 high-level seismic design
- PCS battery unit management (for string PCS version)
- Advanced biometric heat dissipation technology

Excellent Performance

- Active balancing throughout the entire BESS chain (cell, pack, enclosure)
- Higher energy density, lower LCOE, higher revenue
- Higher environmental tolerance for desert, highland and humidity
- Pre-assembled, no battery module handling on site

Smart Management

- Real time monitoring
- Rapid positioning and analysis of system faults
- Intelligent operation and maintenance

STRING PCS VERSION

	Aqua-C2.5S-5015-2500-2h	Aqua-C2.5S-5015-1250-4h
DC-side Parameters		
Nominal Capacity	5015 kWh	
Cell Type	LFP3.2 V / 314 Ah	
System Configuration	1P416S*12	
Battery Voltage Range	1123.2~1497.6 V	
Nominal Battery Voltage	1331.2 V	
AC-side Parameters		
Nominal Power	215 kW * 12	107 kW * 12
Max. THD of Current	< 3 % (Nominal Power)	
DC Component	< 0.5 %	
Nominal Voltage	690 V	
AC Voltage Range	607 V ~759 V	
Power Factor	≥ 0.99 (Nominal Power)	
Nominal Frequency	50 Hz / 60 Hz	
System Parameters		
Auxiliary Power Supply	400 V / 480 V	
SOC Calculation Accuracy	≤3 % (After Balancing)	
Operating Temperature Range	-30 °C ~ 50 °C (> 45 °C Derating)	
Relative Humidity	≤ 100% RH (Non-condensing)	
Max. Working Altitude	4000 m	
Protection Grade	IP 55 (Europe) Type 3S (US)	
Cooling Method	Intelligent Liquid Cooled	
Noises	≤ 75 dB (A) , Standard Version ≤ 65 dB (A) , Silencer Assembly (Optional)	
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/Ice Loads	30 lb /sqft	
Wind Loads	129 mph	
Dimensions (W*D*H)	6058*2438*2896mm	
-Fire Suppression System	Fire Control Alarm Panel, Smoke and Heat Detector, Audible and Visual Alarm, Ventilation System (NFPA 69 compliance for US), Dry Pipes with Sprinklers, Aerosol (Optional), Vent Panel (Optional, NFPA 68 compliance for US)	
Communication Interface	Ethernet (RJ45 / Optical Fiber)	
Compliance (US)	UL1973, UL 9540A,UL9540, UL 1741SB, IEEE1547 NFPA 855, NFPA 69, NFPA68 (Optional)	
Compliance (Europe)	IEC61000, IEC62619, IEC62933, IEC63056, IEC62477-1, EN50549 G99, CEI 0-16, VDE-AR-N 4110, VDE-AR-N 4120, NTS 2.1, NTS SENP 1.1	

HIGH-VOLTAGE BOX VERSION

Type Designation	Aqua-C2.5H-5015-2500-2h
DC-side Parameters	
Nominal Capacity	5015 kWh
Cell Type	LFP 3.2 V / 314 Ah
System Configuration	1P416S*12
Battery Voltage Range	1123.2~1497.6 V
Nominal Battery Voltage	1331.2 V
Nominal Power	2500 kW @ 0.5 CP (2h) 1250 kW @ 0.25 CP (4h)
System Parameters	
Auxiliary Power Supply	400 Vac, 50 Hz (Europe), 480 Vac, 60 Hz (US)
SOC Calculation Accuracy	≤3 % (After Balancing)
Operating Temperature Range	-30 °C ~ 50 °C (Optional -35 °C)
Relative Humidity	≤100% RH (Non-condensing)
Max. Working Altitude	4000 m
Protection Grade	IP 55 (Europe), Type 3S (US)
Cooling Concept	Intelligent Liquid Cooled
Noises	≤ 75 dB (A), Standard Version ≤ 65 dB (A), Silencer Assembly (Optional)
Weight	≤ 42000 kg
Corrosion-proof Grade	C4 / C5 (Optional)
Seismic Level	IEEE 693 Moderate Design Level Qualification IEEE 693 High Design Level Qualification (Optional)
Snow/Ice Loads	30 lb / sqft
Wind Loads	129 mph
Dimensions (W*D*H)	6058*2438*2896mm
Fire Suppression Concept	FACP, Smoke and Heat Detectors, Flammable Gas Detector, Sound Beacon, Compliance Ventilation System, Dry Pipes with Sprinklers, Aerosol (Optional)
Communication Interface	Ethernet (RJ45 / Optical Fiber)
Compliance (US)	UL 1973, UL 9540A, UL 9540, UN 38.3, Compliant to NFPA 855, NEC 2023, NFPA 70E, etc.
Compliance (Europe)	IEC61000, IEC62619, IEC629335-2, IEC 63056, EN 62477-1, UN38.3/UN3536, CE
Transportation	Fully Populated with Battery Packs



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Aqua-C Series Liquid-Cooling System

Excellent Safety

- Real time monitoring
- Enhance safety system design
- IEEE693 high-level seismic design

Excellent Service

- Customized services
- Intelligent operation and maintenance
- Flexible terms and conditions

Excellent Performance

- Higher energy density
- Longer lifecycle with increased usable energy
- Enhanced environmental tolerance
- Improved availability
- Lower auxiliary consumption
- Decreased LCOE, increased revenue
- Active balancing throughout entire chain (cell, pack, enclosure)

Product Name	Aqua-C1		Aqua-C2
Container model	20 ft		
Nominal capacity	3.727 MWh	4.073 MWh	4.18 MWh
Cell type	LFP 3.2V/280 Ah	LFP 3.2V/306 Ah	LFP 3.2V/314 Ah
Max. charge/discharge power	1863 kW	2037 kW	2446 kW
Nominal DC voltage	1331 V		
DC Voltage (full power)	1164 V-1500 V		
Dimensions (W*D*H)	6058 mm*2438 mm*2896 mm		
Lifetime	20 years		
Weight	≤ 38 t		
Auxiliary power supply	480 Vac, 60 Hz/400 Vac, 50 Hz		
SOC calculation accuracy	≤ 3 %		
SOH (end of life)	60 %	70 %	
Operation temperature	-30 to 50 °C	-30 to 50 °C (optional -35 °C)	
Maximum operation altitude	≤ 2000 m		
Environmental humidity	0 - 100 % RH		
Degree of protection	IP55 or NEMA Type 3		
Anti-corrosion degree	C4 (EN ISO 12944)		
Noise	< 75 dB (A)	< 70 dB (A)	
Snow/ice loads	30 lb/sqft		
Wind loads	129 mph		
Seismic level	IEEE 693 High design qualification		
Communication interfaces	Ethernet		
Fire suppression method	Dry pipes with sprinklers, aerosol (optional)		
Compliance	CE, RoHs and Reach, IEC 62619, IEC 63056, UL1973, UL 9540A, UL 9540, UN 38.3, NFPA 855, NEC, etc.		
	/	UKCA BS/EN/IEC 62477-1	
Cooling method	Intelligent liquid cooling		
Transportation	Fully populated with battery modules		