

Battery Energy Storage Solution

iONX GridX Series

SECTORS



COMMERCIAL & INDUSTRIAL



UTILITY



AGRICULTURAL

SOLAR INTEGRATION





ENERGY ARBITRAGE



APPLICATIONS

POWER **SECURITY**

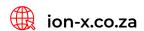


DEMAND CLIPPING



GRID STABILITY





PRODUCT INTRODUCTION

Grid-Ready Energy Storage

Liquid-Cooled Containerized Battery energy storage

This container energy storage system is mainly used for storing and transferring energy, which supports battery status monitoring and management, wide application such as grid peak regulation, frequency regulation, grid-connected access of new energy power stations, etc. This Liquid cooling energy storage system is a highly integrated product, which integrates battery system, battery management system, thermal management system, fire suppression system, power supply and distribution system, monitoring system, environmental control system, and cable routing, etc., and has the characteristics of high safety and reliability, easy installation, high energy density and long cycle life.



Product features



Liquid Cooling



AC/DC TURN-KEY



Fire Suppression
WATER, AEROSOL



High Energy
DENSITY



High Safety
PROTECTION

PRODUCT DETAILS

Efficient liquid cooling with ethylene glycol-water mix for uniform temperature control and reduced energy loss.

····· Fire Safety

Dual-layer FM-200 and backup water fire suppression system ensures protection under extreme conditions.



Integrated BMU, BCMU, and SCU architecture for precise monitoring and optimized battery performance.

1500V large-module design boosts energy density, cuts equipment and land costs, and enhances overall system efficiency.

· IP55 rated

Built to perform reliably in any weather or climate conditions.



- · Certificate of ISO9001
- Certificate of ISO14001
- · Certificate of ISO45001
- · Certificate of CE
- · UN38.3

Unit Power Control Box

This unit is responsible for the powering of the air-conditioning, lighting, fire-fighting controls and other small power units.

High Safety

Advanced temperature, smoke, and gas detection ensures rapid response, early warning, and accident prevention.

FIRE SAFETY

Intelligent Platform for Cabin Level and Station Level FSS



Fire Detection Warning Components

- $\cdot \, \mathsf{Explosion}\text{-}\mathsf{proof}\, \mathsf{heat}\, \mathsf{detector}$
- · Explosion-proof smoke detector
- · Flammable-gas detector
- · Explosion-proof CO² detector
- · Pack level fire detector



Fire Protection Scheme

Liquid cooling ESS fire extinguishing solution.

- · Cluster level detection
- · PACK level injection straying
- · Precise fire extinguishing
- ·Cooling
- · Continuous suppression.

Multi-Point Fire Extinguishing

- · Battery pack
- · Battery cluster
- $\cdot \, \mathsf{Battery} \, \mathsf{compartment} \,$
- $\cdot \, \mathsf{Electrical} \, \mathsf{compartment} \,$

PLANT APPLICATIONS

Solution for PV+ESS Micro Grid System

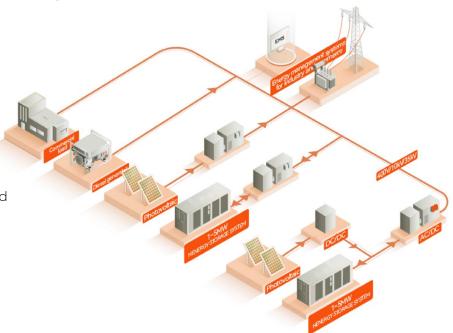
AC Coupled Micro Grid | DC Coupled Micro Grid

· Support on/off grid operation

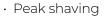
· With grid forming, black start function

· Support multiple energy connection

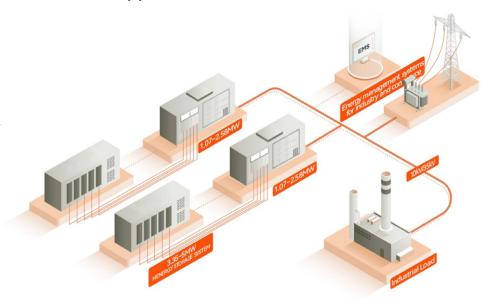
· Modular design, easy to expand



Large Commercial and Industrial Applications



- · Demand response
- · Demand management
- · Dynamic scaling
- · PV+ESS micro grid



SYSTEM MANAGEMENT

Software Features



Product highlights

Cloud platform



- Real-time visualization at both **power station** and **equipment levels**
- Centralized management of multi-station operational indicators
- Seamless integration with energy storage, photovoltaic, and charging equipment, enabling unified monitoring and control
- Flexible control strategies configurable by time period, battery status, or load type
- Advanced value mining, Al-based prediction, and decision analysis powered by big data
- Multi-operator access support with complete data isolation for security and privacy
- Customizable reporting: generate daily, monthly, and annual operational and revenue reports with ease





SPECIFICATIONS

AC Parameters					
Nominal AC power	1075kVA	1290kVA	1505kVA	1725kVA	
AC connection	Three-phase three-wire (3P3W)				
Overload capability	1183kVA	1419kVA	1656kVA	1898kVA	
AC voltage	690(-15%~10%)V				
AC frequency	50/60 (-5~5) Hz				
THDi	≤3%				
AC PF	-0.9~0.9				

System Parameters					
Size (W*H*D)	2200*2160*1300mm				
Weight	1921kg	2014kg	2107kg	2200kg	
Noise	<75dB				
Protection	IP54				
Operating temp.	-20°C to 60°C (De-rating over 45°C)				
Cooling	Air cooling				
Humidity (storage)	0~95% (No condensing)				
Max altitude	3000m (De-rating over 3000m)				

Battery - 5.01MWh			
Cell type	3.2V/314ah		
System configuration	1P416S*12		
Battery voltage range	1164,8~1497,6V		
Container size	6058*2550*3150mm		
Weight	~45t		
Corrosion resistance	C5		
Degree of protection	IP55		
Operation temp.	-30°C~50°C		
Humidity range	0~95%		
Battery system	Liquid cooling		
Fire suppression system	Pack-level fire protection + compartment-level + water spray		
Maximum altitude	4000m		
Certifications	UL9540A, UL1973		



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