



LiFeP04 – All-in-One Liquid Cooled IP54 Cabinet

iONX Cube Series

SECTORS



COMMERCIAL
& INDUSTRIAL



RESIDENTIAL
COMPLEX



AGRICULTURAL

APPLICATIONS



SOLAR
INTEGRATION



ENERGY
ARBITRAGE



POWER
SECURITY



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iONX

UNLEASHING SUSTAINABLE POWER

Smart Liquid-Cooling Energy Storage Cabinet

125 KW / 261 KWH All in one ESS Cabinet, scalable, install anywhere.

The smart liquid-cooled energy storage cabinet brings together advanced technologies including a battery cluster, bidirectional inverter, intelligent management systems, distribution unit, precise temperature control, and built-in fire protection.

Its modular design makes it easy to maintain, upgrade and expand, while delivering outstanding safety, exceptional reliability, fast deployment, superior energy efficiency, and intelligent, worry-free operation.



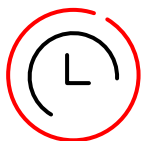
Product features



261kWh
ENERGY



10 Year
WARRANTY



10,000+
CYCLES



IP54
PROTECTION



3 Tier
MANAGEMENT



3 Tier
FIRE SAFETY

PRODUCT DETAILS

The iONX All-in-One unit is a compact solution with great advantages to cater for dropdown applications with sensitive environmental requirements.

Audible and Visual Alarm

Emits a loud sound and flashing light in case of an emergency with the energy storage system.

Liquid Cooling Air Intake

Explosion Relief Ventilation Fan

Expels flammable gases (CO , CO_2 , H_2) generated by thermal runaway of batteries in the energy storage system.

Firefighting Water Interface

Emits a loud sound and flashing light in case of an emergency with the energy storage system.

PCS Air Intake

Touch Screen

Used to set parameters for the energy storage system and display its operating status.

Indicator Lights

Indicates the operating status of the energy storage system.

Emergency Stop Button

Can be used to stop the system in case of an emergency.



Distribution Box

Contains main breaker, surge protection, auxiliary circuits, local controller, and communication ports.

Liquid Cooling System

Provides heating/cooling, keeps PACK temperature in optimal range to boost performance and lifespan.

PCS (Power Conversion System)

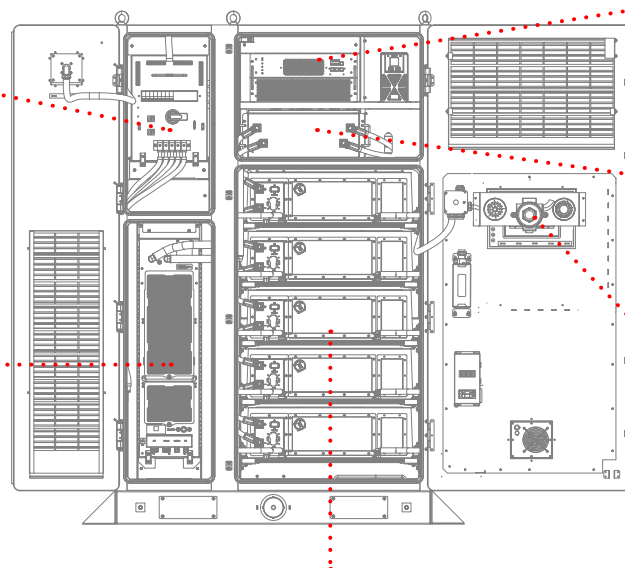
125 kW AC output, 400 V, PF -1~1. Handles 1.1x overload (137 kW) for 10 min.

Battery Management System (BMS)

Manages pack performance, safety, and data exchange to maximize battery utilization.

Fire Protection System

Fire extinguishing is automatically activated in the event of a smoke, gas or fire detection and alarming, preventing cascading.

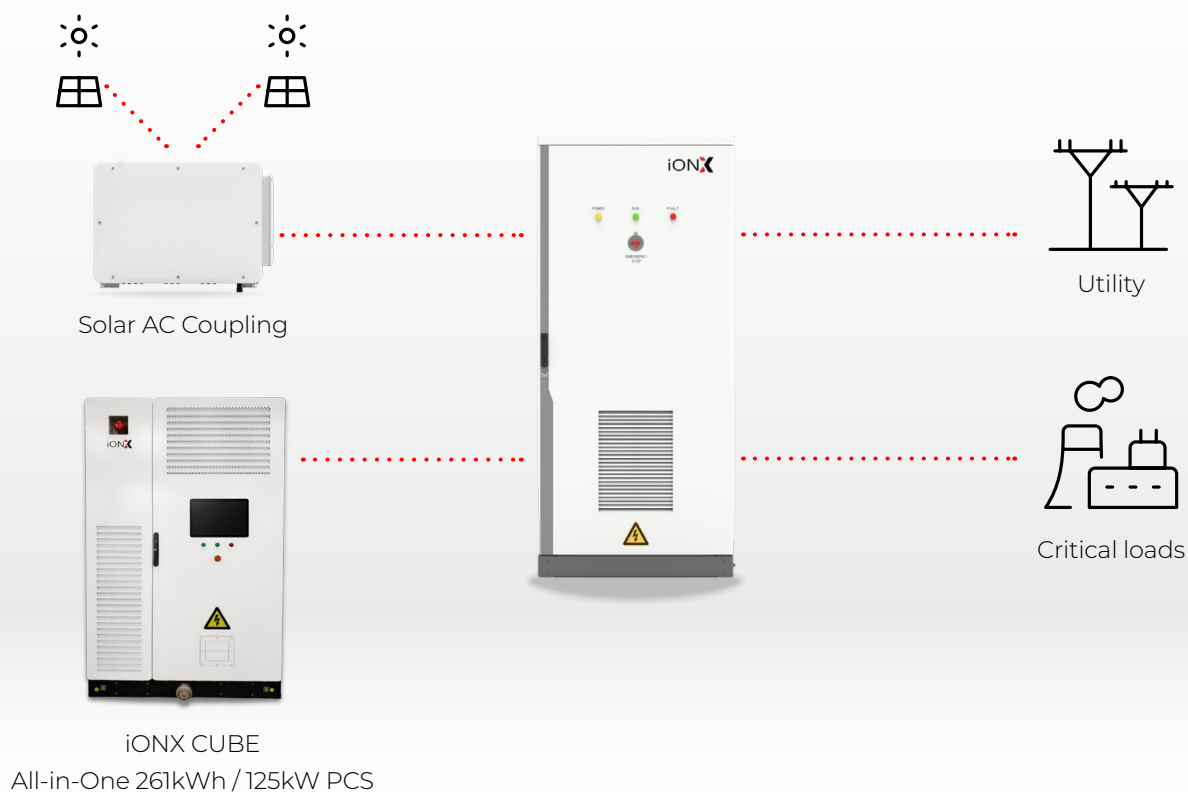


Liquid Cooling Battery Pack

52.2 kWh modules, IP67-rated, 314 Ah cells with active/passive balancing. Includes safety valve, fire suppression, and liquid cooling ports

Static Transfer Switch (STS) information

The iONX STS cabinet is designed to be used together with PCS cabinet to realize <20ms transfer between on-grid and off-grid modes automatically, it can also achieve automatic switching between diesel generator and the grid.



Electrical Parameters

Models:	375kW	500kW	750kW	1000kW
Rated AC voltage	400V	400V	400V	400V
Rated AC current	546A	728A	1092A	1456A
Rated AC frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Max. load output apparent power	375kVA	500kVA	750kVA	1000kVA
Max. load output current	546A	728A	1092A	1456A
Max. PCS current	546A	728A	1092A	1456A

Seamless on/off grid transfer within <20ms | ATS adopts TUV certified switch | IP54 design
Modular design for easy maintenance | Available in 375kW, 500kW, 750kW and 1000kW

SYSTEM MANAGEMENT

System Management & Control

The Cube Series EMS is a dedicated platform for managing commercial liquid-cooled cabinets. It collects and processes data from multiple interfaces (RS-485, CAN, IO ports) to monitor and control the entire system.

- Comprehensive Data Collection – Battery, PCS, cooling, fire protection, and auxiliary signals.
- Coordinated Control – Ensures safe operation with real-time protection and fault response.
- Flexible Operation Modes – Manual, economic, backup power, planned, and centralized control.

Battery & Remote Management

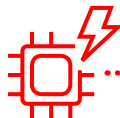
The EMS integrates with a three-level BMS to optimize battery performance and enable remote, intelligent management via a mobile platform.

- Battery Health Optimization – Real-time monitoring, cell-level protection, and SOX calculation.
- Integrated Safety Commands – Issues protective actions based on pack conditions.
- Remote Monitoring & Alerts – Intelligent scheduling, data analysis, fault alarms, and reporting.



Hardware

Robust integrated module, cluster and system hardware



Processing

Simplified internal protocol management, Algorithm models and cloud data security.



Remote Management

Easy remote multi-site management and monitoring, web-based and mobile application.

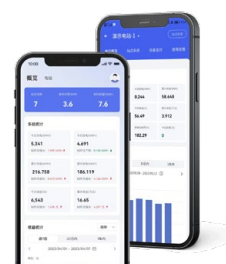
Cloud platform



- 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, AI-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

Mobile platform

- Real-time monitoring of key parameters of energy storage equipment
- Early warning & alarm system with remote fault diagnosis capabilities
- Comprehensive reporting on charge/discharge data and revenue statistics
- Account permission isolation with support for both Chinese and English interfaces
- Remote mobile management of energy storage equipment and energy utilization



SPECIFICATIONS

- ✗ Off-grid, 4 units in parallel
- ✗ On-grid, 8 units in parallel
- ✗ Tier 1 A-Grade 314ah battery cell modules

Cube - 261		Specification
DC battery parameters	Cell type	EVE 3.2V/314Ah
	Battery pack configuration	1P52S/52.2kWh
	Battery system configuration	1P260S
	Voltage range	78VDC-936VDC
	Capacity	261kWh
	Temperature detection	Cell + copper busbar
	Charging and discharging rate	< 0.5P
AC parameters (grid connection)	Rated power	125kW
	Max output power	137.5kW
	Rated grid voltage	400VAC, -15%~+15%
	Rated grid frequency	50Hz/60Hz, 2.5Hz
	Power factor	-1 (leading) ~ (lagging)
	THDi	<3% (rated output power)
	AC connection	Three-phase-four-wire
System parameters	System efficiency	Max 90%
	Cooling mode	Liquid cooling
	Cycle life	10,000 cycles , 90%DOD*
	Operating temperature range	-20 °C ~ 50 °C (40 °C derating)
	Anti-corrosion level	C5
	Dimensions	1420W x 1425D x 2250H
	Weight	≤2.8T
	Fire Fighting	Aerosol (pack level + cabinet level), water interface
	Ingress protection	IP54
	Intelligent monitoring	HMI
	Function	Peak-load shifting, Demand management, Anti-reflux, Multi-unit parallel

* Warranty T&C's apply



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