

LiFeP04 - Battery Energy Storage

iONX Core Series

SECTORS



COMMERCIAL & INDUSTRIAL



RESIDENTIAL COMPLEX



AGRICULTURAL

APPLICATIONS



SOLAR INTEGRATION



ENERGY ARBITRAGE



POWER SECURITY





Modular. Intelligent. Reliable.

Air-cooled, adaptable rack-mounted storage enabling scalable, efficient energy use.

The iONX Core Series is our most versatile and scalable high-voltage solution, designed for flexible installation on modular racks.

Each 16 kWh Air-cooled module features both Active and Passive balancing, ensuring efficient thermal management and long-term reliability. With capacities ranging from 129 kWh to 241 kWh per cluster and up to 16 clusters in parallel,

iONX Core delivers a future-proof energy storage solution with 12-Year/10,000 cycles product warranty with an 80% depth of discharge. It supports leading inverter brands, integrates its intelligent tiered management with leading EMS, and is built for easy installation, safe operation, and aesthetic appeal, ensuring seamless compliance with regulations and optimal uptime.



Product features



Intelligence

Autonomous A.I battery management with predictive fault detection for safe, optimised performance.



3Tier Control

Three-layer management ensures precise energy flow, system stability and efficient battery operation.



Modularity

Flexible, modular design scales effortlessly with your changing energy needs.



12-Year Warranty

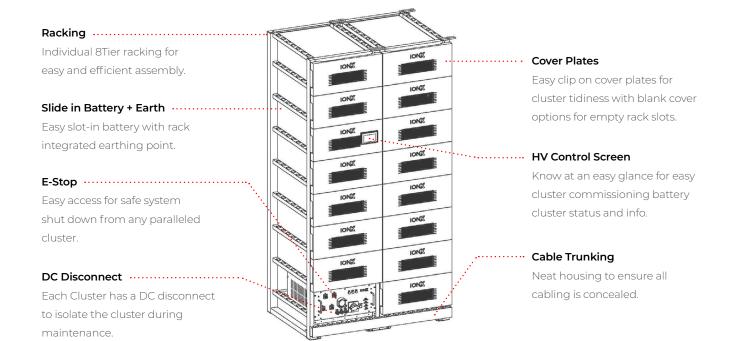
10,000 cycle life backed by a reliable, cost-effective 12-year warranty.



Support

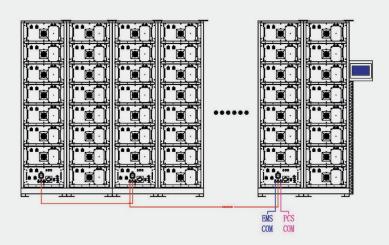
Direct, comprehensive support structured for smooth implementation and long-term success.

PRODUCT DETAILS



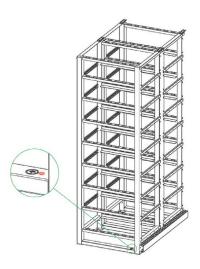
Parallel 16 Clusters

Parallel up to 16 clusters with iONX 3Tier control to maximise plant capacity while ensuring system stability.



3Tier Management

A 3Tier Manager Screen is included from 5Tiers and higher – allowing for Super DATA management



Earthing and Grounding

Each battery module and HV box is earthed directly to the rack via a simple screw fixation. Racks are interconnected and bonded to a common earthing point. Grounding contact surfaces between rack, modules, and HV unit ensure reliable continuity. A dedicated rack grounding point allows quick, safe connection to the plant's grounding system, ensuring the entire rack is earthed and preventing unearthed modules.

BATTERY 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

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



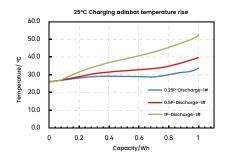
SPECIFICATIONS

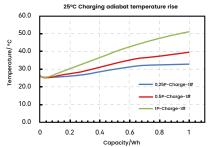
- X Flexible (between 129 241 kWh)
- X Modular up to 3.858MWh Parallel further with multi 16 Clusters to increase project size
- X Tier 1 A-Grade battery cell modules
- 🗶 10000 cycle / 12 year warranty

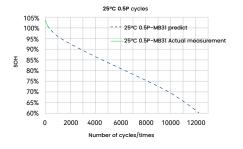


	CORE 129	CORE 145	CORE 161	CORE 177	CORE 193	CORE 209	CORE 225	CORE 241
Cluster Information								
Cluster Capacity (kWh)	129	145	161	177	193	209	225	241
No. modules	8	9	10	11	12	13	14	15
Rated kWh (80% DoD)	103	116	129	141	154	167	170	193
Nominal Voltage	409,6	460,8	512	563,2	614,4	665,6	716,8	768
Min Operating Voltage	358,4	403,2	448	492,8	537,6	582,4	627,2	672
Max Operating Voltage	467,2	525,6	584	642,4	700,8	759,2	817,6	876
Dimensions								
Power/m2 (kWh/m²)	139.6	157.1	174.5	192.0	209.4	228.0	244.3	261.8
Weight (kg)	1086	1203	1320	1437	1554	1671	1788	1905
Cluster Dimension (WxHxD)	1180(mm) x 2278(mm) x 777(mm)							
		Oper	ation Da	ta				
Std. Charge/Discharge	0.5C / 0.5C							
Max. Discharge	1C<5min							
Operating temp	25°C + - 3°C							
Humidity	10% to 95%							
Max DoD (ave.)	80%							
Warranty/ Cycles/ EOL	10,000 cycles / 12 year - 65% EOL*							
		Comm	nunicatio	ns				
Inverter compatibility	ATESS, Megarevo, Solis, Deye							
EMS communication	As per requested, no restriction							
		Env	ironmen	t				
Installation	Indoors							
Altitude	<3000m							
IP rating	IP20							
		Cert	ification	s				
Cluster	CE, UN38.3, RoHS, IEC62619							
Cells	UL9540A, UL1973							

* Warranty T&C's apply









ion-x.co.za