

Micro-Grid Series

Battery Storage System

Our integrated micro-grid solutions offer autonomous energy storage and management for commerce and industry. Combining energy storage systems and smart control technologies, we provide a customized decentralized power grid that reduces electricity costs, and ensures a stable power supply.



Master Battery

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AC 60kWh Air-Cooling Battery(US)

SCSCabinet



💡 Optimized Temperature Control Under Full Power

During full power operation, the Ecube maintains the battery's maximum temperature below 40°C, ensuring efficient and safe performance even under heavy load.

💡 Advanced Integrated Technologies for Versatile Power Management

Advanced integrated technologies setup includes a redundant power supply design, enabling black start capability and off-grid operation, making it ideal for situations that demand frequent and intense charging and discharging.

💡 High-Safety Lithium Iron Phosphate (LFP) Batteries with Fire Suppression

The Ecube uses Lithium Iron Phosphate batteries, known for their stability and safety. It's further equipped with an aerosol fire extinguishing system, which covers both the battery pack and the entire system, enhancing safety measures.

💡 Comprehensive Safety Features with Fire and Gas Detection

The system includes robust safety mechanisms like detection systems for combustible gases, smoke, and temperature variations. It also has active exhaust and fire alarm systems, providing a multi-layered safety approach.

💡 Scalable Battery Capacity for Enhanced Storage

The design of the Ecube allows for battery expansion, with the potential to scale up to a maximum capacity of 360KWh. This scalability makes it suitable for a wide range of power needs, from moderate to extensive.

💡 Ideal for High-Rate Energy Cycling

Given its high-rate charging and discharging capabilities, the Ecube is particularly well-suited for applications that require frequent and intensive energy cycling, ensuring reliability and efficiency in demanding scenarios.

Battery

Cell Chemistry	LiFePO ₄
Module Energy (kWh)	5.12
Module Nominal Voltage (V)	51.2
Module Capacity (Ah)	100
Battery Module Qty In Series (Optional)	12
System Nominal Voltage (V)	614.4
System Operating Voltage (V)	562.5–681.6
System Energy (kWh)	61.44
System Usable Energy (kWh) ¹	55.29
Charge/Discharge ² Current (A)	Recommend: 50 Nominal: 100 Peak Discharge(2 mins, 25°C): 125

AC Output

Connections	277V / 480V Three Phase
Continuous AC Power with PV	60,000W 72.2A (480V)
Continuous AC Power from Batteries	60,000W 72.2A (480V)
Surge AC Power 7 sec	"120,000VA 144.4A x 277V x3"
Parallel Stacking	Yes - Up to 12*
Frequency	60/50Hz
Continuous AC Power with Grid or Generator	132,000W 160A L-N (277V)
CEC Efficiency	96.5% (Peak 97.5%)
Idle Consumption Typical—No Load	60W
Sell Back Power Modes	Limited to Household/Fully Grid-Tied
Design (DC to AC)	Transformerless DC
Response Time (Grid-Tied to Off-Grid)	5ms
Power Factor	± 0.8 - 1.0

PV Input

Max Allowed PV Power	78,000W
Max PV Power Delivered to Battery & AC	60,000W
Outputs	1,000V @ 36A
Max DC Voltage (Voc)	200-850V
MPPT Voltage Range	180V
Starting Voltage	4
Number of MPPT	2
Max Solar Strings Per MPPT	36A
Max DC Current per MPPT (Self Limiting)	120kVA w/ no PVdc
Max AC Coupled Input (Micro / String Inverters)	60kVA w/ 78kW PVdc

General Parameters

Working Temperature	-20 ~ 55°C
Communication Interface	CAN, RS485, Wi-Fi, LTE
Humidity	5%~85%RH
Altitude	≤2000m
IP Rating	IP55
Dimension (W*D*H)	1030*1050*2170mm / 40.6*41*85.4in
Weight Approximate	1093kg / 2409.7lb
Storage Temperature	-20 ~ 35°C
Recommend Depth of Discharge	90%
Cycle Life	>8000 cycles
Warranty	3 years free, paid from the 4th to the 15th year
Certification	UL1973, UL9540A, UN38.3

