Catalog
UPS

2025

AEC

www.aecups.com

Modular Lithium Batteries | LiFePO4

Hot-swappable Lithium Modules

The AEC Lithium System integrates power distribution, and **hot-swappable 50 Ah $LiFePO_4$ battery modules** into a compact cabinet, delivering high-density, reliable backup for critical applications such as data centers, healthcare, telecom, and industrial facilities .

AEC unique **modular and parallel battery architecture** supports up to 20 x 50 Ah packs per cabinet and enables online capacity expansion with minute-level maintenance, minimizing both CAPEX and OPEX.
The adopted **three-layer BMS architecture** (PBMU/SBMU/MBMU) ensures the reliability of lithium-ion battery system from cell, module and system layers.

Description

Built on robust $LiFePO_4$ chemistry, the system offers superior thermal stability, a longer cycle life, and enhanced safety over traditional lithium-ion cells. Modules feature dual electrical and physical isolation layers, integrated fire suppression, and automatic fault shutdown capabilities, delivering unparalleled protection in critical environments .

Each battery module contains a dedicated DC/DC converter enabling precise CC/CV charge control, autonomous current balancing, and the ability to intermix modules of different ages without performance loss. Independent module intelligence rapidly isolates faulty units without system shutdown, while centralized touchscreen monitoring provides full visibility of both battery and UPS status.

The 7-inch touchscreen built into the lithium cabinet monitors module-level voltages, currents, State-of-Charge, and temperatures, as well as adjust charging profiles, alarm thresholds, and system settings—all directly on the display for streamlined setup and proactive maintenance

- **Modular, hot-swappable** battery cabinet for Lithium **LiFePO4** packs
- **7" Touch screen color display**;
- Advanced **LiFePO4 chemistry** technology;
- **DC\DC Converter** in each module;
- **Hot-swappable** single modules;
- **Two-level fire protection;**
- **Adaptive SOC management** = old and new battery mixed;
- Electrical and physical **double isolation**
- **Plug and play design;**
- **Parallel up to X units.**

Features

UL9540 Certification

Ultra-fast charging time

100A Charger for fast recharge

THREE LEVEL 3 UPS

LiFePo4

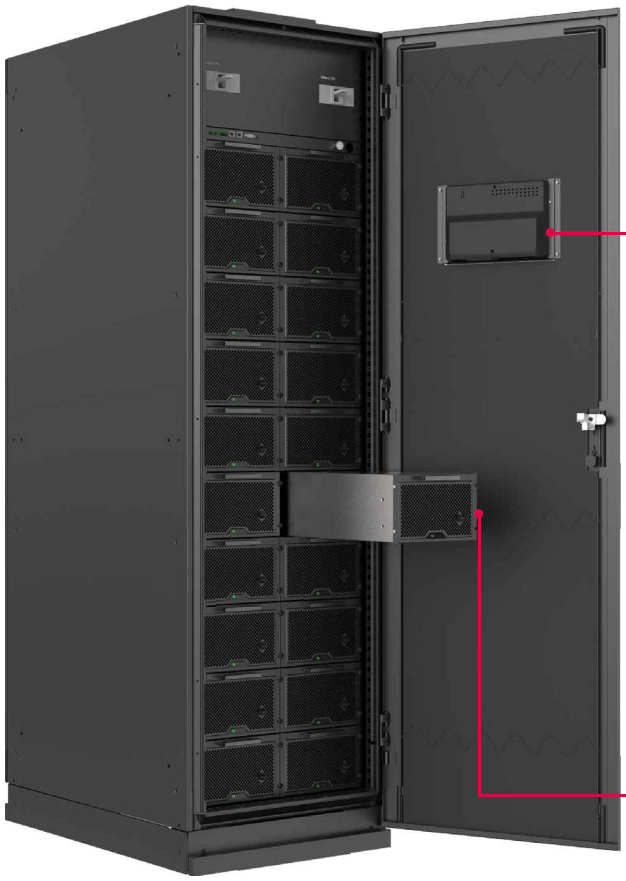
WARRANTY 5 YEARS

24h/7 ASSISTANCE

Scan the QR code to find out more informations on LITHIUM MODULAR!

Modular cabinet | Parallel Lithium systems

7" Inches Color Touch-screen

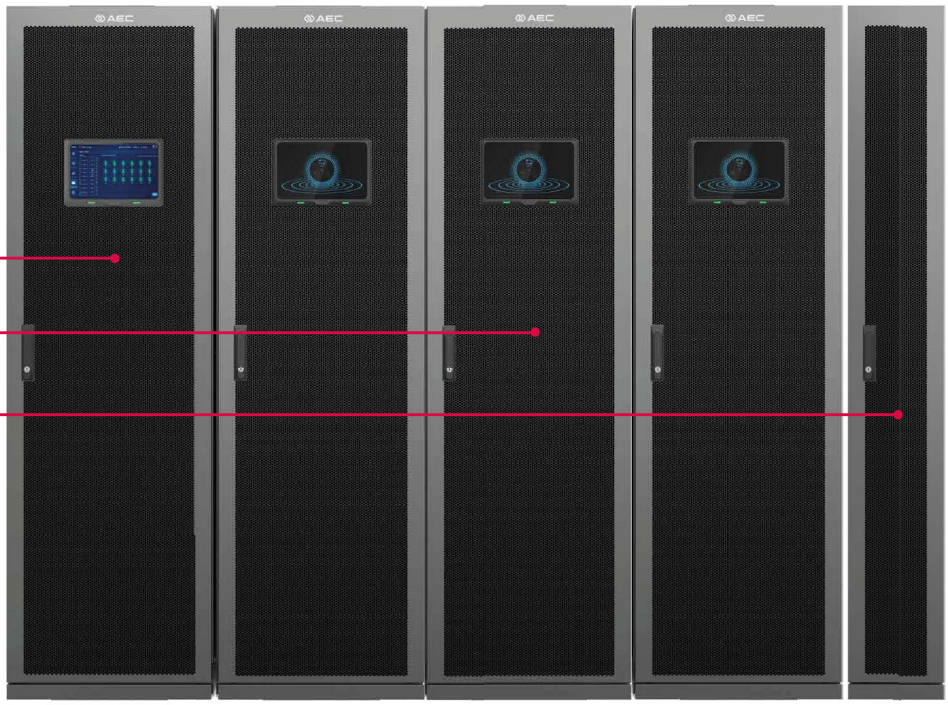


50Ah LiFePO4 Module
Hot-swappable 20 pcs max

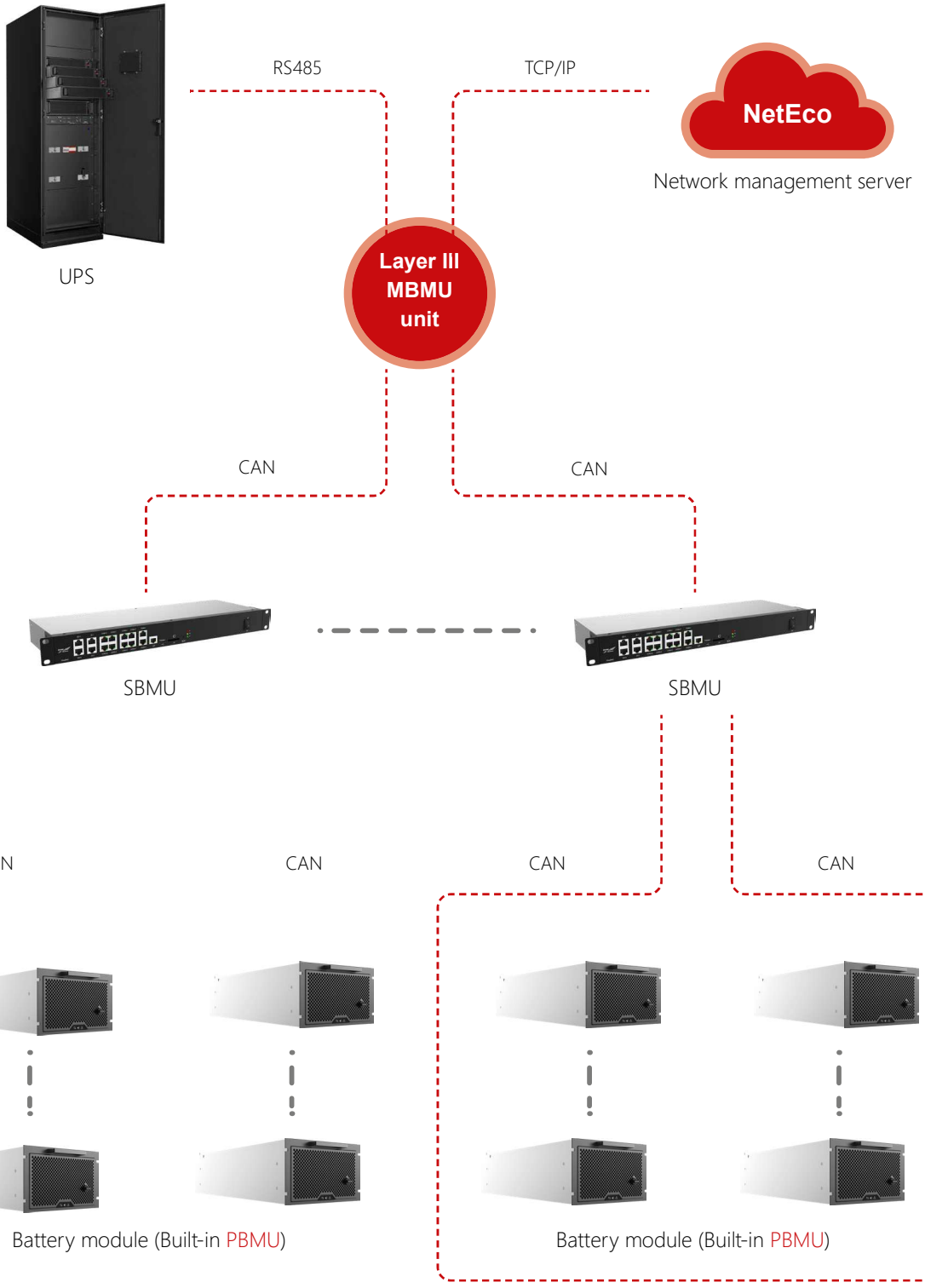
Master Cabinet Lithium
with touch-screen

Parallel X Cabinets

Combiner cabinet for multiple systems



Three-layer BMS Architecture



Standards and certifications

Scan the QR code to download the User Manual LITHIUM Series!

BATTERY CELL	50AH
Type	LFP
Dimensions (Mm)	27.0×148.5×133.0
Weight (Kg)	1.11±0.1
Rated Capacity (Ah)	50
Discharge Rate (C)	4
Charge Rate (C)	1
Rated Voltage (V)	3.2
Cycle Life	5,000 TIMES (@50% DOD)
Battery Pack	50Ah
Battery Rated Voltage (V)	57.6
Battery Capacity (Ah)	50
Max. Energy (Kwh)	2.3
Dc/Dc Rated Output Voltage (V)	240*2 (IN SERIES OR PARALLEL)
Dc/Dc Rated Output Power (Kw)	10
Dimensions (W*D*H) (Mm)	223×665×153
Weight (Kg)	38±2
Battery Cabinet	50Ah x 20
Battery Max Energy (Kwh)	58
Rated Output Voltage (V)	240/±240/480
System Rated Output Power (Kw)	200
Number Of Battery Modules	20
Current-Unbalance	≤5%
Soc Accuracy	≥95%
Communication	RS485, CAN, TCP/IP and Dry contact
Working Temperature (°C)	0~40 (+15~+30 Recommended)
Altitude (M)	0~4000M, Above 2000M Derate
Dimensions (W*D*H) (Mm)	600×860×2000
Weight (Kg)	1000±10
Maximum Paralleled Cabinets	8
Optional	Distribution Cabinet, Fire Edge Cabinet, It Rear Frame
Self-Discharge Rate	≤3% (0-30°C/1 Month)

All information is for reference only, subject to change by AEC at any time, and does not constitute contractual obligations.

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