



## EnerArk-M

# Integrated Outdoor Battery Energy Storage Cabinet



### Product Features

- ⚙️ Plug-and-Play for ready to use.
- ⚙️ Compact with modular design.
- ⚙️ Multiple firefighting collaboration
- ⚙️ Unbalanced loads operation.
- ⚙️ Support with solar.
- ⚙️ Intelligent remote monitoring.
- ⚙️ Grid ancillary services
- ⚙️ 7\*24 round-the-clock monitoring



**5 Tiers Safety Design**  
Much safer  
More reliable.



**Response <200ms**  
Applied for grid  
auxiliar service.



**Multi Energy Accessing**  
Solar, diesel generator,  
wind turbine, etc.

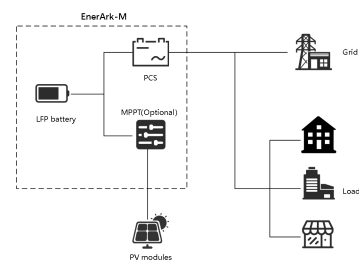


**More Availability**  
Modular design +  
O&M cloud platform.



### Product Overview

**EnerArk-M** is a compact and Plug-and-Play battery energy storage system with easy to be transported, installed and maintained. It is an All-in-One system comprises of PCS, batteries, BMS, EMS, MPPT, automatic fire control system and temperature control system. High-performance EV grade LiFePo4 batteries ensures high safety and reliability with four layers of security architecture with intelligent BMS design. The synergy of the system components and unique design enable to achieve effective charging and discharging for various applications with high energy density and maximized battery life time to provide the lower LCOS. It supports AC Coupling and DC coupling applications with its ease in integration and suitable for all ranges of C&I energy storage projects.



**Factory, Office Park, Hotel, Farm.**  
TOM arbitrage, peak power shaving



**EV Charging Station**  
Power extension, solar benefit maximizing



**Microgrid**  
Multi-energy integration with solar,  
generator, wind turbine, etc.



**Distribution Network Operator (DNO)**  
Auxiliary grid service, VPP

## Integrated Outdoor Battery Energy Storage Cabinet

Model	EnerArk-M-NBN-P30		EnerArk-M-NBN-P50
Battery Parameters			
Battery cell model	LiFePO <sub>4</sub> - 280Ah		
Module model	1P20S		
Battery capacity range	107kWh		
On-Grid AC Side Parameters			
Grid connection type	3P4W		
Charging / discharging power	30kW	50kW	
Grid voltage range	AC 400V ±15%		
Frequency range	50±5Hz		
Rated AC output current	43A	72A	
Power factor	0.8 (Leading) ~ 0.8 (Lagging)		
Harmonics	≤3% (at rated power)		
Off-Grid AC Side Parameters			
Wiring method	3P4W+PE		
Output voltage range	400(±1%)V		
Rated output power	30kW	50kW	
Rated output Frequency	50Hz		
Frequency accuracy	0.2Hz		
General Parameters			
Dimensions (W*H*D)	1233mm*2093mm*1304mm		
Maximum weight	About 1500kg		
Protection grade	IP55 (Battery Cabin) IP54 (Electrical Cabin)		
Cooling method type	Battery Cabin (air conditioner) & Electrical Cabin (forced air cooling)		
Fire fighting system	Combustible gas detection + Novec1230 + water fire protection		
Altitude	< 2000m		
Operating temperature	-20°C ~ 50°C		
Corrosion Protection Grade	C3		
Noise level	≤75dB		
Communication interface	RS485, Ethernet		
Communication protocol	Modbus RTU, Modbus TCP/IP		
Product standard warranty	5 years, 6000 cycles (0.5C, 95%DOD, EOL:70%)		
PV Side Parameters (Optional)			
Maximum PV input power	30kW/60kW	30kW/60kW/90kW/100kW	
MPPT voltage range	200V-850V		
Number of PV inputs	1/1	1/1/2/2	
Maximum input current	100A/200A	100A/200A/300A/400A	
Certifications	System: CE(IEC61000,IEC62477), IEC62619,UN3480, CEI021,CEI016, VDE2510, RoHs, IEC62933 Converter: G99, VDE4105, EN50549, AS/NZS 4777, CE(IEC61000,IEC62477) , IEC62109, NC RfG, NRS097,VDE4110 Cell: IEC62619, UL1973, UL1642, UL9540A PACK: UN38.3		

\* The system will be derated when the ambient temperature exceeds 45°C.

\*\* The system will be derated when the altitude is between 2000 and 3000m.



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