

# **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

Much safer More reliable.

Applied for grid auxiliar service.

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

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( 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. Highperformance 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

## **EnerArk-M**



# **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)	1220mm*2093mm*1340mm	
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	
Display		
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
MPP1 voltage range		
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 Converter: CE(IEC61000,IEC62477) ,G99, VDE4105, EN50549, NC RfG AS/NZS 4777, IEC62109, NRS097,VDE4110(on going) Cell: IEC62619, UL1973, UL1642, UL9540A PACK: UN38.3	
	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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