



EnerArk

Integrated Outdoor Battery Energy Storage Cabinet



Product Features

- Plug-and-Play for ready to use.
- All-in-One integrated modular design.
- DC coupled for solar accessing.
- Unbalanced loads operation.
- Multiple firefighting collaboration
- Virtual Power Plant (VPP) enabled.
- Auxiliary grid service application.



5 layers Safety Design
Much safer
More reliable.



Response <200ms
Applied for grid
auxiliar service.



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

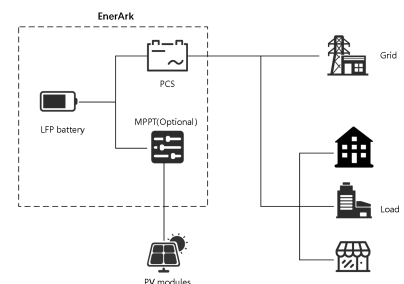


More Availability
All-in-one design +
Partition management.



Multi-Function

EnerArk 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 maximization



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



Distribution Network Operator (DNO)
Auxiliary grid service, VPP



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Model	EnerArk-NBN-P30		EnerArk-NBN-P50	EnerArk-NBN-P100
DC Side Parameters				
Cell type	LiFePO4 - 280Ah			
Module model	1P20S			
Battery capacity range	125kWh ~ 215kWh	125kWh ~ 215kWh		215kWh
On-Grid AC Side Parameters				
Grid connection type	3P4W			
Charging / discharging power	30kW	50kW		100kW
Grid voltage range	AC400 （±15%） V			
Frequency range	50(±5)Hz			
Rated AC output current	43A	72A		144A
Power factor	0.8 (Leading) ~ 0.8 (Lagging)			
Harmonics	≤3% (at rated power)			
Off-grid AC Side Parameters				
Load type	3P4W			
Rated output power	30kW	50kW		100kW
Rated output voltage	AC400V±1%			
Rated output frequency	50Hz			
Rated current	43A	72A		144A
Frequency accuracy	0.2Hz			
General Parameters				
Dimensions (W*H*D)	1686mm*2093mm*1354mm			
Maximum weight	2500kg			
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			
Anti-corrosion grade	C3			
Relative humidity	0-95% (non-condensing)			
Operating temperature*	-20℃～50℃			
Altitude**	<2000m			
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		30kW/60kW/90kW/120kW
MPPT voltage range	200V-850V	200V-850V		
Number of MPPTs	1/1	1/1/2/2		
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. For every 100m increase in altitude, the system will be downgraded by 5%.



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