



- Parallel operation of multiple cabinets
- Global installation and application
- Supporting DC coupling with solar
- CE certificates for the whole system



- 5 tiers of safety design** and **water firefighting** for higher safety.
- Quickly System response for **grid auxiliary service**.
- Accessing of **solar, wind turbine, diesel generator**, etc.
- Parallel connection** of multiple cabinets for larger power & capacity.
- Modularized design and **easy & quick O&M** optimize the system utilization.

Office Park/Community

Peak-load Shifting
TOU Tariff Arbitrage
Electricity Cost Saving
Grid Auxiliary Service

Solar + Storage + Charging Station

Store Extra Solar Energy
Peak-load Shifting
Electricity Cost Saving
Eco-friendly Solution

Plaza/ Hospital/Hotel

Peak-Shaving
Backup Power
Demand Side Response
Power Quality Optimization
TOU Tariff Arbitrage

Solar + Storage Microgrid

Backup Power
Store Extra Solar Energy
Distributed Energy Integration
Optimizing The Power Grid Upgrading



EnerArk

Integrated Outdoor Battery Energy Storage Cabinet

Parameters	EnerArk-NBN-P30	EnerArk-NBN-P50	EnerArk-NBN-P100
Battery Parameters			
Cell type & capacity		LiFePO ₄ - 280Ah	
Battery module type		1P20S	
System capacity range	125kWh~215kWh	125kWh~215kWh	215kWh
AC Side On-grid Parameters			
Grid type		3P4W	
Charging/discharging power	30kW	50kW	100kW
Rated grid voltage		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% (@rated power)	
AC Side Off-grid Parameters			
Load type		3P4W	
Rated output power	30kW	50kW	100kW
Rated output voltage		AC 400V±1%	
Rated output frequency		50Hz	
Frequency accuracy		0.2Hz	
Rated current	43A	72A	144A
General Parameters			
Dimension (W*D*H)		1686mm*1392mm*2093mm	
Max. weight		2500kg	
Ingress protection		IP55 (Battery Cabinet) IP54 (Electrical Cabinet)	
Cooling method		HVAC (Battery compartment) & Forced air cooling (Electrical compartment)	
Fire fighting system		Combustible gas detection + Novtec1230 + water fire suppression	
Anti-corrosion grade		C3	
Relative humidity		0-95% (non-condensing)	
Operating temperature *		-20°C~50°C	
Operating altitude**		<2000m	
Noise emission		≤75dB	
Communication interface & protocol		Rs485, Ethernet; Modbus RTU, Modbus TCP/IP	
Display		HMI	
Warranty		5 years, (can be extended to 10 years)	
PV Side Parameters (Optional)			
Max. PV input power	30kW/60kW	30kW/60kW/90kW/100kW	30kW/60kW/90kW/120kW
MPPT voltage range	200V~850V	200V~850V	200V~850V
Number of MPPT	1/1	1/1/2/2	1/1/2/2
Number of PV inputs	1/1	1/1/2/2	1/1/2/2
Max. input current	100A/200A	100A/200A/300A/400A	100A/200A/300A/400A
Certifications			
System: CE(IEC61000,IEC62477), IEC62619,UN3480, CEI021(on going),CEI016(on going), VDE2510(on going)			
Converter: G99, VDE4105, EN50549, AS/NZS 4777, CE(IEC61000, IEC62477) ,IEC62109, NC RfG, NRS097,VDE4110(on going)			
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.

GESA - An Appointed Exclusive Distributor In South Africa

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EU Headquarters: Vilion Tech. B .V. (Amsterdam, the Netherlands.)

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