

EnerArk

Integrated Outdoor Battery Energy Storage Cabinet



Vilion-BESS
energy flowing with demand



Multiple cabinets connected in parallel up to **60 Nos.**

Supporting DC coupling with solar

Global installation and application

Certificates of CE(IEC62619, IEC62477, IEC61000), G99, EN50549, VDE4105, AS4777, UN3480, UN38.3

- 4 tiers of safety design for higher **safety** and reliability.
- System response** time < 100ms. Grid auxiliary service.
- Accessing of **solar, wind turbine, diesel generator**, etc.
- Parallel connection of multiple cabinets up to **60 Nos** 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



Parameters	EnerArk2.0-NBN-P30	EnerArk2.0-NBN-P50	EnerArk2.0-NBN-P100
Battery Parameters			
Cell type & capacity	LiFePO ₄ – 280Ah		
Battery module type	1P20S		
System capacity range	143kWh ~ 215kWh	143kWh ~ 215kWh	215kWh
AC Side On-grid Parameters			
Grid type	3P4W		
Charging/discharging power	30kW	50kW	100kW
Rated grid voltage	AC 400V		
Grid voltage range	±15%		
Frequency range	45Hz ~ 55Hz		
Rated output current	43A	72A	144A
Harmonics	≤3% (@rated power)		
General Parameters			
Dimension (W*H*D)	1900mm*2100mm*1330mm		
Max. weight	2500kg		
Ingress protection	IP55 (Battery compartment) IP34 (Electrical compartment)		
Cooling method	HVAC (Battery compartment) & Forced air cooling (Electrical compartment)		
Fire fighting system	FM200/Novtec1230		
Anti-corrosion grade	C3		
Relative humidity	0–95% (non-condensing)		
Operating temperature *	–20°C~50°C		
Operating altitude**	<2000m		
Noise emission	≤75dB		
Communication interface	RS485, Ethernet		
Communication protocol	Modbus RTU, Modbus TCP/IP		
Warranty	5 years (can be extended up to 10 years)		
PV Side Parameters (Optional)			
Max. PV input power	30kW/50kW	30kW/50kW/100kW	30kW/50kW/100kW
MPPT voltage range	200V~850V	200V~850V	200V~850V
Number of MPPT	1/1	1/1/2	1/1/2
Number of PV inputs	1/1	1/1/2	1/1/2
Max. input current	100A/200A	100A/200A/400A	100A/200A/400A

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

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



Vilion (Shenzhen) New Energy Technology Co., Ltd.

Tel: +86 0755 89454625

Email: Contact@szweilan.com

Version No.: 1.0
 Website: www.szvilion.com
 Add: Lianzhan Industrial Park, No.2 Lanjing North Road, Pingshan District, Shenzhen, China.
 Vilion reserves the right of final interpretation of the above data and reserves the right to change the above data without prior notice.