

Vertical Energy Storage System



- Long Lifespan**
15 years of design service life
- Intelligentize**
Efficient operation and maintenance
Automatic and intelligent management
- Visualization**
Visual display interface, easy to maintain

- Modular**
Modular design is simple and fast
- Multi parallel use**
Hybrid grid inverter, support parallel
- Multifunction**
Support RS485/RS232 wireless network

Product Introduction

Vertical Energy Storage System is a complete battery system for home energy storage, available in both LFP and Sodium. The system adopts modular design, stacked structure, through the parallel battery modules to increase the capacity of the system, achieving plug and play. The system is safe and reliable, can be applied to home storage, industrial, and commercial energy storage.

Application Introduction

Home energy storage, industrial, and commercial energy storage.

Model Parameters

Model	Merak-3K-5/10		Merak-5K-5/10/15			Merak-10K-10/15		
AC Input								
Rate Input Voltage(VAC)	208/220/230/240;L+N+PE					230VAC		
Voltage Range(VAC)	90~280±3 (normal mode) ; 170~280±3 (UPS mode)					170-280(For personal Computer) ; 90-280(For Home Appliances)		
Frequency(Hz)	40~70 (Default)			50/60(Auto Adaptive)				
AC Output								
Rated Capacity(kW)	3		5			10		
Peak Power(kVA)	6		10			20		
Rate Voltage(VAC)	208/220/230/240					230		
Frequency	50/60Hz±0.1%							
OverLoad Capacity (Battery Mode)	60s@102%~110%load;10s@110%~130%load; 3s@130%~150%load;0.2s@>150%load					3s@130%-150% load; 10s@110%-130% load		
Charger(PV/AC)								
Solar Charger Type	MPPT							
Max PV input power(kW)	1.5		6			10		
MPPT Range@Operating Voltage(VDC)	30~115		120~450			90~450		
Max PV Open Circuit Voltage(VDC)	145		500					
Max PV Charge Current(A)	60		80			150		
Max AC Charge Current(A)	60		80			150		
Max.Charge Current (PV+AC)	60		80			150		
Battery								
Normal Voltage(VDC)	25.6			51.2				
Capacity(Ah)	200	400	100	200	300	200	300	
Energy(Wh)	5120	10240	5120	10240	15360	10240	15360	
Charge Voltage(VDC)	27.2~27.6V					57.6V		
Overcharge Protection(VDC)	29.2V					58.4V		
Battery type	LFP							
Interface								
HMI	LCD							
Interface	Modbus							
Monitoring	WiFi(Optional)							
General Data								
Ingress Protection	IP20							
Operating Temperature	0~50°C					0~45°C		
Relative Humidity	20%~95%(Non-condensing)					5%~95%(Non-condensing)		
Storage Temperature	-15°C~60°C					-10°C~50°C		
Net Weight(kg)	68	118	68	118	168	128	178	
Dimensions/W*D*H(mm)	598*200*794	598*200*1224	598*200*794	598*200*1224	598*200*1654	600*200*1342	600*200*1772	
Max.Operating Altitude	4000m(Derating above 1000m)							
Noise Emission	≤50dB							