

KV-AIO ALL-IN-ONE ENERGY STORAGE SYSTEM

KV-AIO SERIES · 6kW / 10.24kWh (200Ah) - 12kW / 20.48kWh (400Ah)



Built-in Lithium Battery Auto-Activation

BMS Protection

Dustproof Design

RGB Status Lighting

Universal Wheel Mobility

Constant Voltage Protection

Datasheet

Specifications	6KW PLUS-200AH	12KW PLUS-400AH
PV (DC INPUT)		
Recommended Max. PV Input Power	6000W	12000W
Max. Input Voltage	500V	
MPPT Operating Voltage Range	85V-450V (@75V start up)	
Number of MPPT	1	2
Max. Number of Input Strings Per MPPT	1	
Max. input Current Per MPPT	27A	27A/13A (MAX:40A)
Max. Short-Circuit Current Per MPPT	35A	37A/17.5A
GRID (AC INPUT)		
Max output power	6000W	12000W
Max output current	50A	70A
Rated grid voltage	220/230/240V (L, N, PE)	
Rated grid frequency	50/60Hz	
Acceptable range	170-280 Vac (for UPS), 90-280 Vac (for home application)	
BATTERY PARAMETERS (BIDIRECTION)		
Battery type	LiFePO4	
Battery voltage range	40-60 Vdc	
Battery capacity	10.24kWh	20.48kWh
Rated Battery Voltage	48Vdc/51.2Vdc	
Max. charge/discharge current	120A / 130A	210A / 240A
BMS Communication Mode	Software Version	
BACK-UP OUTPUT (AC OUTPUT)		
Rated output power	6000W/6000VA	12000W/12000VA
Rated output current	27.3A	54.5A
Rated output voltage/Frequency	220/230/240V (L, N, PE) 50/60Hz	
Surge power	12000VA 5s	22000VA 5s
THDV (@ linear load)	<3%	
EFFICIENCY		
Peak Efficiency	98%	
Max. MPPT Efficiency	99.90%	
IP Rating	IP21	
GENERAL PARAMETERS		
Operating temperature range	-10℃ ~ 50℃	
Relative humidity range	10%~95%	
Max. operating altitude	>2000m derating	
Standby self-consumption	<10W	<20W
Cooling mode	Fan Cooling	
Dimension DWH	450×450×515mm	800×440×365mm
Weight	≈118kg	≈170kg

* If the ambient temperature is too high or too low, performance will be limited.

* Under specific test conditions.