

# Single-Phase Residential Energy Storage Inverter

IP66-HB8K48ME / IP66-HB10K48ME / IP66-HB12K48ME



Supports PV inverter, generators, and microgrid inputs, suitable for new and modified photovoltaic and microgrid systems



Support RSD and AFCI optional configurations to provide safer protection for the system



App real-time monitoring, supports online remote OTA upgrades, easy operation and maintenance



Supports multiple inverters with EPS output in parallel, and can be expanded to small industrial and commercial applications



Mains and PV input power oversized at a ratio of 1.5, resulting in a more stable system operation

POWER  
**MAXMA**

## Hybrid Inverter Specification

MODEL	IP66-HB8K48ME	IP66-HB10K48ME	IP66-HB12K48ME
<b>PV input parameter</b>			
Max. input power	16kW		18kW
Max. open-circuit voltage		550Vdc	
Rated input voltage		360Vdc	
Start-up voltage		150Vdc	
Min. operating voltage		100Vdc	
MPPT voltage range		100-540Vdc	
Full power MPPT voltage range		300-500V	
Max. input current per MPPT		30A/30A	
Max. short-circuit current per MPPT		40A/40A	
MPPT quantity		2	
Number of input strings per MPPT	1/2		2/2
<b>Battery input parameter</b>			
Battery type	Li-ion battery/Lead acid battery		
Voltage range	42-58Vdc		
Max. charge/discharge current	180A/180A		250A/250A
<b>AC input and output parameter(grid)</b>			
Max. apparent power of grid	12kVA	15kVA	18kVA
Max. input current	54.5A	68.2A	81.8A
Input voltage range	184-276Vac		
Input frequency range	50±5Hz		
Rated output power	8kW	10kW	12kW
Max. output apparent power	8kVA	10kVA	12kVA
Rated output voltage	1/N/PE, 220Vac/230Vac		
Rated output frequency	50Hz		
Rated output current	36.4A/34.8A	45.5A/43.5A	54.5A/52.2A
Max. output current	36.4A	45.5A	54.5A
Power factor	>0.99(0.8 leading-0.8 lagging)		
THDI	≤3%(@ rated power)		
<b>Generator input</b>			
Max. input power		10kW	12kW
Max. input current		45.5A	54.5A
<b>AC output parameter(back-up)</b>			
Rated output power		10kW	12kW
Max. apparent power		10kVA	12kVA
Rated output voltage	1/N/PE, 220Vac/230Vac		
Rated output frequency	50Hz		
Rated output current		45.5A/43.5A	54.5A/52.2A
Max. output current		45.5A	54.5A
THDV	≤3%(linear load)		
Switching time	≤20ms		
<b>Efficiency</b>			
Maximum efficiency	97.8%		
MPPT efficiency	99.9%		
<b>Protections</b>			
Protections	Over/under voltage, over/under-frequency, overload, output short-circuit, over temperature, residual current monitoring unit, output over-current, insulation resistance detection, anti-islanding, surge protection		
Surge protection	DC Type II/AC Type II		
<b>Others</b>			
Dimensions(WxHxD)(mm)	450x600x270		
Weight(kg)	45		
Topology	High frequency isolation(for battery)		
IP rating	IP66		
Operating temperature	-25°C~+60°C		
Cooling mode	Smart cooling		
Altitude	3000m		
Noise level(1m)	≤55dB		
Installation method	Wall-mounted		
<b>Standards</b>			
Safety regulation	IEC/EN 62109-1/-2, AS62109		
EMC	EN 61000-6-1/-2/-3/-4		
Grid connection	NRS097-2-1:2017		