ONE inverter

Professional Manufacturer of Solar Equipment

HMS - SERIES

Hybrid Solar Inverter

6.2KW **48V**

High Transfer Efficiency :

This Pure Sine Wave Solar Inverter is a combination of an inverter, battery charger, AC auto-transfer switch and MPPT solar charge controller. High transfer efficiency is above 95%.

MPPT Charge controller :

120A MPPT controller with high tracking efficiency of up to 99% can charge 48v lead-acid batteries (Seal, AGM, Gel, Flooded), LiFePo4 batteries and lithium batteries from solar panels, the grid, or a generator. Maximum PV Array Power is 7000W and the MAX PV input voltage is 500VDC.

Parallel Function :

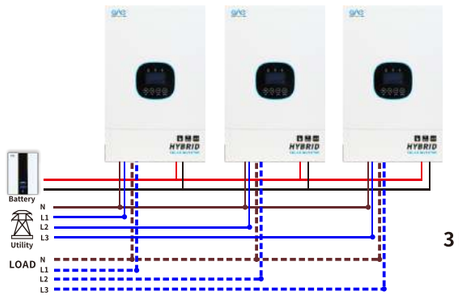
The 6.2KW solar inverter charger allows connection of up to 6 units simultaneously. When you connect multiple inverters in parallel, the combined power capacity of your system multiplies, making it a cost-effective solution for larger energy demands.

Flexible Setting of the Priority for Charging and Output :

This inverter charger provides 3 charging modes(Solar First, Only Solar, Hybrid Charging) and 3 output modes(Utility First, Solar First, SBU priority), you can flexibly set the priority for power input and output based on your specific needs and environmental conditions.

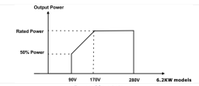
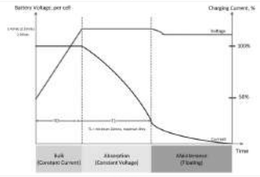
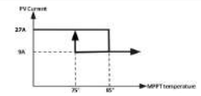
Multiple Protection :

Battery overcharging, Over-discharging, Overloading, Short-circuiting, and auto restart while AC is recovering. This ensures optimal system safety and longevity.



3 Phases parallel connection

Add Power Parallel Connection

Model		HMS-48622M120
Rated Power		6.2KW
Input Voltage Waveform		Sinusoidal (utility or generator)
Nominal Input Voltage		230Vac
Low Loss Voltage		170Vac±7V (UPS) 90Vac±7V (Appliances
Low Loss Return Voltage		180Vac±7V (UPS); 100Vac ±7V (Appliances
High Loss Voltage		280Vac±7V
High Loss Return Voltage		270Vac±7V
Max AC Input Voltage		300Vac
Max AC Input Current		50A
Nominal Input Frequency		50Hz / 60Hz (Auto detection)
Low Loss Frequency		40±1Hz
Low Loss Return Frequency		42±1Hz
High Loss Frequency		65±1Hz
High Loss Return Frequency		63±1Hz
Output Short Circuit Protection		Line mode: Circuit Breaker Battery mode: Electronic Circuits
Efficiency (Line Mode)		>95%(Rated R load, battery full charged)
Transfer Time		10ms typical (UPS); 20ms typical (Appliances)
Output power de-rating: For 6.2KW models, when AC input voltage under 170V the output power will be de-rated.		
Output Voltage Waveform		Pure Sine Wave
Output Voltage Regulation		230Vac±5%
Output Frequency		60Hz or 50Hz
Peak Efficiency		93%
Overload Protection		100ms@≥205% load; 3s@≥150%load;5s@110%~150%load
Surge Capacity		2*rated power for 5 seconds
High DC Cut-off Voltage		66Vdc
Low DC Cut-off Voltage		44Vdc
Nominal DC Input Voltage		48Vdc
Cold Start Voltage		46.0Vdc
Low DC Warning Voltage		46.0Vdc
0 load<20%		42.8Vdc
@ 20%≤load <50%		40.4Vdc
Low DC Warning Return Voltage		48.0Vdc
@ load <20%		44.8Vdc
@ 20%≤load<50%		42.4Vdc
Low DC Cut-off Voltage		44.0Vdc
@ load<20%		40.8Vdc
@ 20%≤load<50%		38.4Vdc
High DC Recovery Voltage		64Vdc
High DC Cut-off Voltage		66Vdc
DC Voltage Accuracy		+/-0.3V@ no load
THDV		<5% for linear load,<10% for non-linear load @ nominal voltage
DC Offset		≤100mV
Charging Current (UPS)		80A
Bulk Charging Voltage	Flooded Battery	58.4Vdc
	AGM / Gel Battery	56.4Vdc
Floating Charging Voltage		54Vdc
Overcharge Protection		66Vdc
Charging Algorithm		3-Step
Charging Curve		
MODEL		6.2KW
Rated Power		7000W
Max. PV Array Open Circuit Voltage		500Vdc
PV Array MPPT Voltage Range		90Vdc~450Vdc
Max.Input Current		27Ax1
Start-up Voltage		120Vdc+/-5Vdc
Maximum Charging Current		120A
Power Limitation		
MODEL		6.2KW
Safety Certification		CE
Operating Temperature Range		-10°Cto40°C
Storage temperature		-15°C~60°C
Humidity		5% to 95% Relative Humidity (Non-condensing)
Product Size(D*W*H)		528mm*325mm*131mm
Packing Size(D*W*H)		583mm*405mm*217mm
N.W.(Kg)		12.2KG
G.W.(Kg)		13.8KG
Max parallel numbers		6
Circulation Current under No Load Condition		Max 2A
Power Unbalance Ratio		<5% @ 100% Load
Parallel communication		CAN
Transfer time in parallel mode		Max 50ms
Parallel Kit		YES

Note: Parallel feature will be disabled when only PV power is available