

Product  
display

Off-grid product series

# Power frequency reverse control all-in-one single phase



### Flexible

Supports multiple working modes;  
Support lithium battery and lead-acid battery;  
Built-in MPPT control module, can view real-time, cumulative power generation.

### Convenient

The 7-inch touch screen system displays more accurately, intuitively and humanely.

### Reliable

Using advanced DSP, MCU and DDC real-time processing full digital control technology, can effectively ensure the core system accurate and fast running;  
High efficiency and high reliability IGBT inverter technology combined with high frequency pulse width modulation technology PWM, inverter efficiency is higher;  
Ac input over/under voltage, output over/under voltage, output overload, short circuit protection, over temperature protection, under voltage warning, battery overcharge protection.



Residential electricity consumption



Hotel villa



Vehicle-ship island



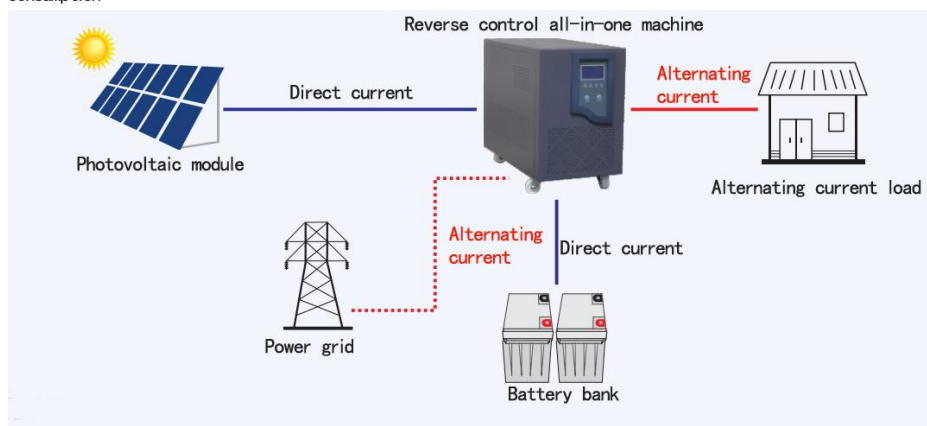
Animal husbandry



No-power area



Industrial equipment



Model number	HN-AP150	HN-AP200	HN-AP300	HN-AP400	HN-AP500	HN-AP600
Input parameters (PV)						
Maximum power	1.5kW	3.3kW	3.3kW	5.76kW	6.5kW	6.5kW
Starting voltage	DC24V:30V, DC48V60V					
Maximum dc voltage	150V					
MPPT voltage range	30-150V					
Mains input parameters (AC)						
Phase	Single-phase +N +G					
Grid voltage/Range/Frequency	220V (170-275V)/50/60Hz					
Battery data						
Battery voltage	DC24/48V			DC48V		
Battery type	Lithium battery/Lead-acid battery/Colloidal battery					
Communication interface	RS232					
Off-grid inverter output						
Rated power	1.5kW	2kW	3kW	4kW	5kW	6kW
Rated output voltage/Frequency	220VAC/50/60Hz					
Automatic switching time	<20ms					
Conventional data						
Efficiency	>85%					
Ambient temperature	-25°C~+60°C					
Dimension (Width * depth * height)	520*220*360mm			520*250*400mm		
Weight	15kg	20kg	22kg	27kg	29kg	31kg
Communication mode	RS232 (matching)					

# Power frequency reverse control all-in-one single phase



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Residential electricity consumption



Hotel villa



Vehicle-ship island



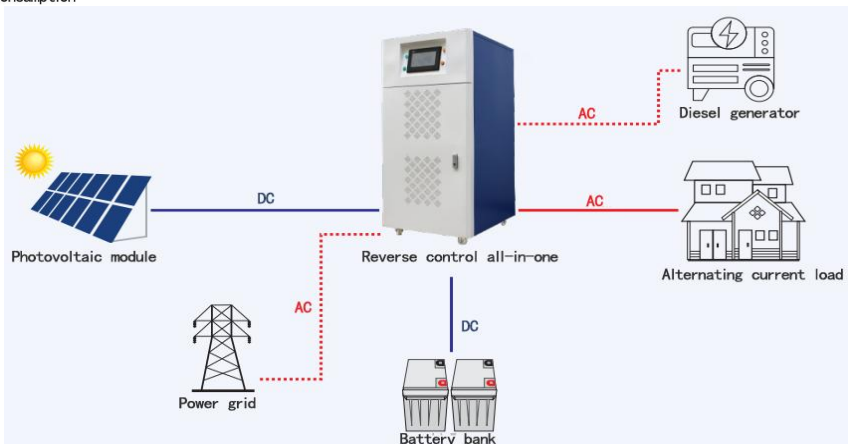
Animal husbandry



No-power area



Industrial equipment



Model number	HN-DPM8K	HN-DPM10K	HN-DPM12K	HN-DPM15K	HN-DPM18K	HN-DPM20K
Input parameters (PV)						
Maximum power	192V:10kW, 220V:11kW			192V:20kW, 220V:22kW		
MPPT voltage range	260-400V					
Maximum dc voltage	450V					
Mains input parameters (AC)						
Phase	Single-phase +N+G					
Grid voltage/Range/Frequency	220V (±20%)/50/60Hz					
Battery data						
Battery voltage	192/220VDC					
Battery type	Lithium battery/Lead-acid battery/Colloidal battery					
Communication interface	RS232					
Off-grid inverter output						
Rated power	8kW	10kW	12kW	15kW	18kW	20kW
Rated output voltage/Frequency	220VAC/50/60Hz					
Automatic switching time	<20ms					
Conventional data						
Efficiency	>85%					
Ambient temperature	-25°C-+60°C					
Dimension (Width * depth * height)	650*570*1270mm					
Weight	110kg	130kg	160kg	180kg	190kg	200kg
Communication mode	RS232 (matching)					

# Power frequency reverse control all-in-one three-phase



## Flexible

Supports multiple working modes;  
Support lithium battery and lead-acid battery;  
Built-in MPPT control module, can view real-time, cumulative power generation.

## Convenient

The 7-inch touch screen system displays more accurately, intuitively and humanely.

## Reliable

Using advanced DSP, MCU and DDC real-time processing full digital control technology, can effectively ensure the core system accurate and fast running;  
High efficiency and high reliability IGBT inverter technology combined with high frequency pulse width modulation technology PWM, inverter efficiency is higher;  
Ac input over/under voltage, output over/under voltage, output overload, short circuit protection, over temperature protection, under voltage warning, battery overcharge protection.



Residential electricity consumption



Hotel villa



Vehicle-ship island



Animal husbandry

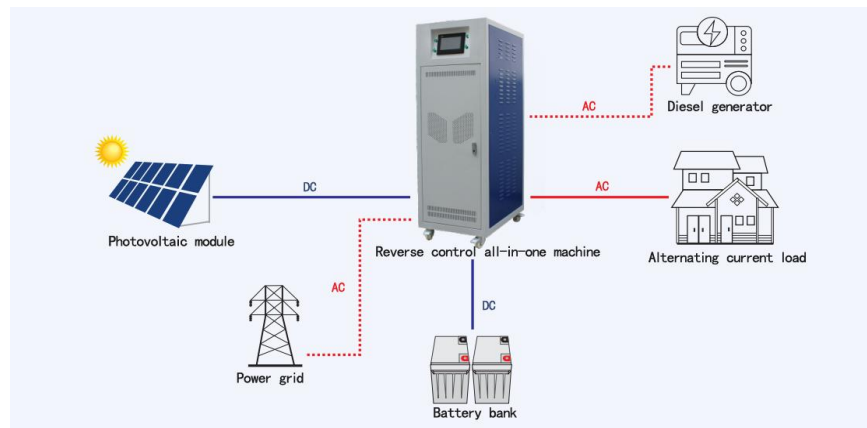


No-power area



Industrial equipment

Model number	HN-SPM8K	HN-SPM10K	HN-SPM15K	HN-SPM20K	HN-SPM25K	HN-SPM30K
Input parameters (PV)						
Maximum power	192V:10kW, 220V:11kW 360V:18kW, 384V:19kW			192V:20kW, 220V:22kW 360V:36kW, 384V:38kW		
MPPT voltage range	260-400V			430-600V		
Maximum dc voltage	450V			650V		
Mains input parameters (AC)						
Phase	Three phase +N+G					
Grid voltage/Range/Frequency	380V (±20%)/50/60Hz					
Battery data						
Battery voltage	192/220/360/384VDC					
Battery type	Lithium battery/Lead-acid battery/Colloidal battery					
Communication interface	RS232					
Off-grid inverter output						
Rated power	8kW	10kW	15kW	20kW	25kW	30kW
Rated output voltage/Frequency	380VAC/50/60Hz					
Automatic switching time	<20ms					
Conventional data						
Efficiency	>85%					
Ambient temperature	-25℃~+60℃					
Dimension (Width * depth * height)	750*550*1600mm					
Weight	140kg	150kg	220kg	250kg	280kg	310kg
Communication mode	RS232 (matching)					





### Flexible

Automatically identify 12V/24V/48V systems  
Flexible support for lithium batteries and lead-acid batteries

### Convenient

Visual screen display is more accurate, more intuitive, more user-friendly, can be pressed to operate

### Reliable

Intelligent maximum power point tracking technology, DSP chip control, high precision, high efficiency, PV wide voltage range input  
Photovoltaic/battery anti-reverse connection protection/short-circuit protection/overcurrent protection



Residential electricity consumption



Hotel villa



Vehicle-ship island



Animal husbandry

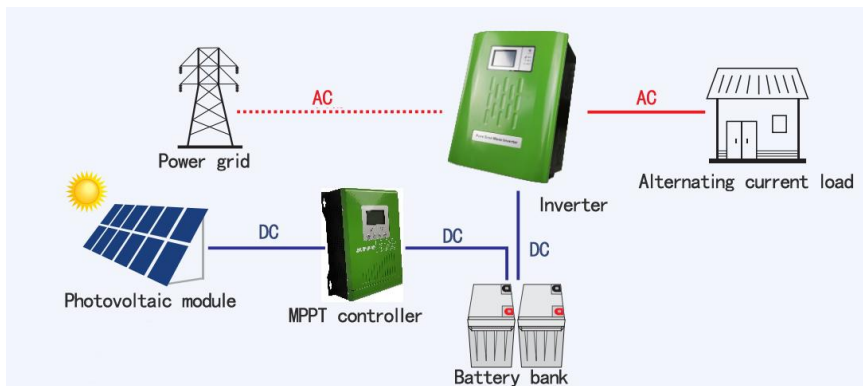


No-power area



Industrial equipment

Model number	HN-MLVC30	HN-MLVC40	HN-MLVC50	HN-MLVC60	HN-MLVC100	HN-MLVC120
Battery voltage	12/24/48V (Automatic recognition)					
Rated charging current	30A	40A	50A	60A	100A	120A
Size (width * height * thickness)	225*290*95mm				270*365*120mm	
Weight	2.6kg		3kg		6.8kg	
Charging mode	MPPT automatic maximum power point tracking					
Charging way	Constant voltage, Constant current, Equal charge, Float charge					
Startup time	<10s					
Static power consumption	2W					
Overall efficiency	>96.5%					
System identifies voltage range	12V:DC9V-15V;24V:DC18V-30V;48V:DC36V-60V					
MPPT operating voltage range	12V:DC20V-100V;24V:DC38V-150V;48V:DC65V-150V					
Maximum solar panel input power	12V:360W/480W/600W/720W/1200W/1440W					
	24V:720W/960W/1200W/1440W/2400W/2880W					
	48V:1440W/1920W/2400W/2880W/4800W/5760W					
LCD display	Yes					
Input polarity reverse protection	Yes					
Output polarity reverse connection protection	Yes					
Low pressure protection	Yes					
High voltage protection	Yes					
Short circuit protection	Yes					
Overtemperature protection	+85℃					
Ambient temperature	-20~+40℃					





### Flexible

The system voltage can be 96V, 192V, 220V, or 240V

Flexible support for lithium batteries and lead-acid batteries

### Convenient

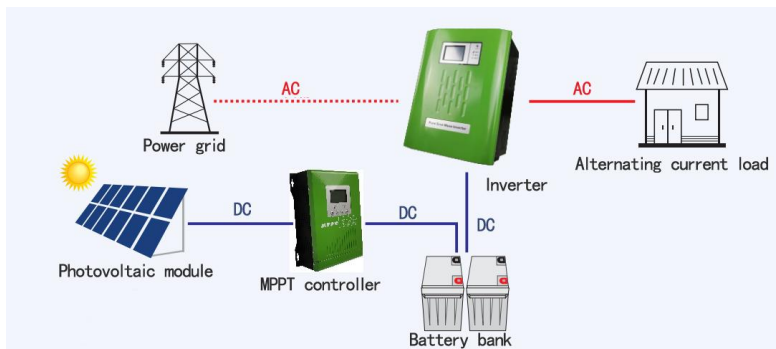
Visual screen display is more accurate, more intuitive, more user-friendly, can be pressed to operate

### Reliable

Intelligent maximum power point tracking technology, DSP chip control, high precision, high efficiency, PV wide voltage range input  
Photovoltaic/battery anti-reverse connection protection/short-circuit protection/overcurrent protection



Residential electricity consumption   Hotel villa   Vehicle-ship island   Animal husbandry   No-power area   Industrial equipment



Model number	HN-MMVC50	HN-MMVC60	HN-MMVC100	HN-MMVC120	HN-MHVC50	HN-MHVC100
Battery voltage	96V				192/220/240V	
Rated charging current	50A	60A	100A	120A	50A	100A
Size (width * height * thickness)	225*290*95mm		270*365*120mm		375*490*140mm	450*580*140mm
Weight	3kg		6.8kg		12.5kg	25kg
Charging mode	MPPT automatic maximum power point tracking					
Charging way	Constant voltage, Constant current, Equal charge, Float charge					
Startup time	<10s					
Static power consumption	2W					
Overall efficiency	>96.5%					
System identifies voltage range	96V:DC72-120V				192V:DC144-240V 220V:DC162-270V 240V:DC180-300V	
MPPT operating voltage range	96V:DC130-180V				192V:DC260-400V 220V:DC280-430V 240V:DC300-430V	
Maximum solar panel input power	96V:4800W/5760W/9600W/11520W				192V:9600W/19200W 220V:11000W/22000W 240V:12000W/24000W	
LCD display	Yes					
Input polarity reverse protection	Yes					
Output polarity reverse connection protection	Yes					
Low pressure protection	Yes					
High voltage protection	Yes					
Short circuit protection	Yes					
Overtemperature protection	+85°C					
Ambient temperature	-20~+40°C					



### Flexible

System voltage 384V/480V system is optional  
Flexible support for lithium batteries and lead-acid batteries

### convenient

Visual screen display is more accurate, more intuitive, more user-friendly, can be pressed to operate

### Reliable

Intelligent maximum power point tracking technology, DSP chip control, high precision, high efficiency, PV wide voltage range input  
Photovoltaic/battery anti-reverse connection protection/short-circuit protection/overcurrent protection



Residential electricity consumption



Hotel villa



Vehicle-ship island



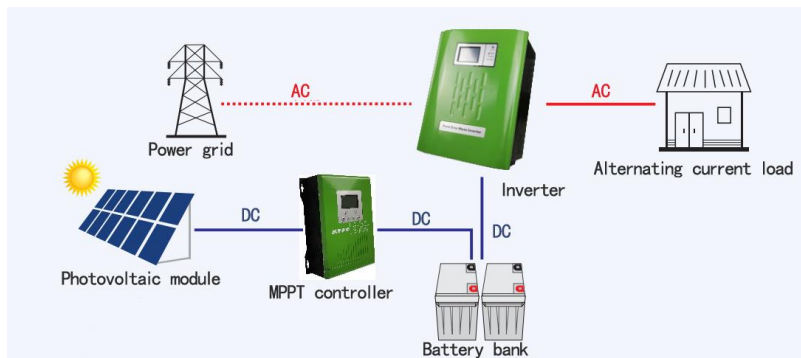
Animal husbandry



No-power area



Industrial equipment



Model number	HN-MGVC50	HN-MGVC100	HN-MGVC150	HN-MGVC200	HN-MGVC250	HN-MGVC300
Battery voltage	384/480V					
Rated charging current	50A	100A	150A	200A	250A	300A
Size (width * height * thickness)	480*420*222mm (Module size)					
Number of modules	1	2	3	4	5	6
Charging mode	MPPT automatic maximum power point tracking					
Charging way	Constant voltage, Constant current, Equal charge, Float charge					
Startup time	<10s					
Static power consumption	2W					
Overall efficiency	>96.5%					
MPPT operating voltage range	500-850V					
Maximum solar panel input power	384V:21 120W	384V:4 2240W	384V:63360W		384V:8448 0W	384V:1056 00W
	480V:26 400W	480V:5 2800W	480V:79200W		480V:1056 00W	480V:1320 000W
					480V:158 400W	
LCD display	Yes					
Input polarity reverse protection	Yes					
Output polarity reverse connection protection	Yes					
Low pressure protection	Yes					
High voltage protection	Yes					
Short circuit protection	Yes					
Overtemperature protection	+85℃					
Ambient temperature	-20~+40℃					