



## Hybrid inverter charger built in MPPT solar inverter

HES MPS solar inverter charger is an all-in-one package. It allows users to supply consumers with 230 V AC power, charges the battery with an integrated MPPT charge controller, and at the same time permits connection to a generator or an available electricity grid.

MPS multi-functional inverter/charger, combining functions of inverter, solar charger and battery charger to offer uninterruptible power support with portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

### Features

- True Pure sine wave inverter
- Built-in MPPT solar charge controller
- Selectable input voltage range for home use
- Selectable charging current based on applications
- Configurable AC/Solar input priority via LCD
- Compatible with grid or generator
- Auto restart while AC is recovering
- Battery optimized by Smart battery charger
- Cold start function
- Parallel 9units max available for MPS 4K/5K

### Protections

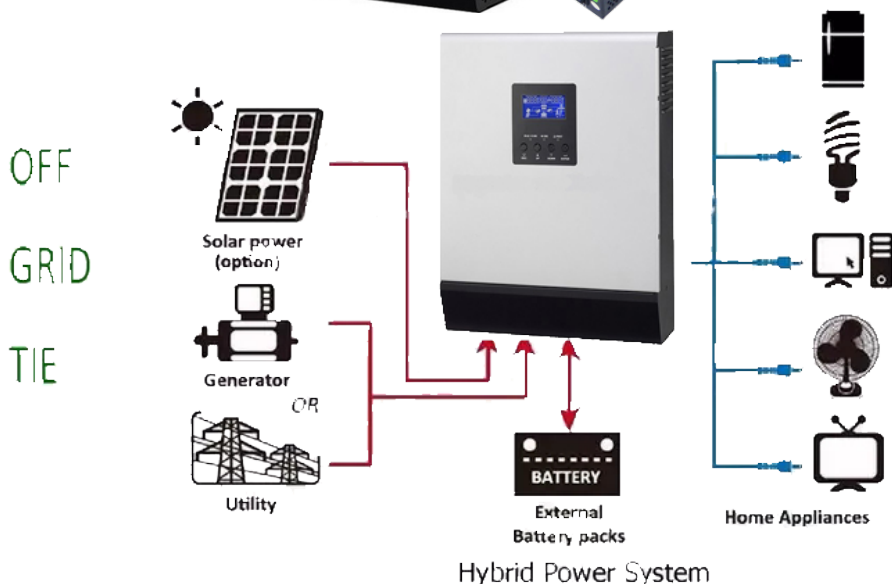
- Low battery alarm,
- low battery shutdown,
- over charger, overload,
- over circuit

### Applications

Home / Office / Farm etc

### Certifications

CE ROHS ISO9001

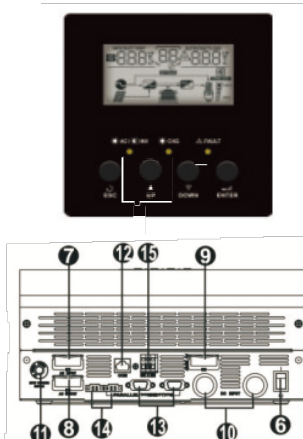




## Specification

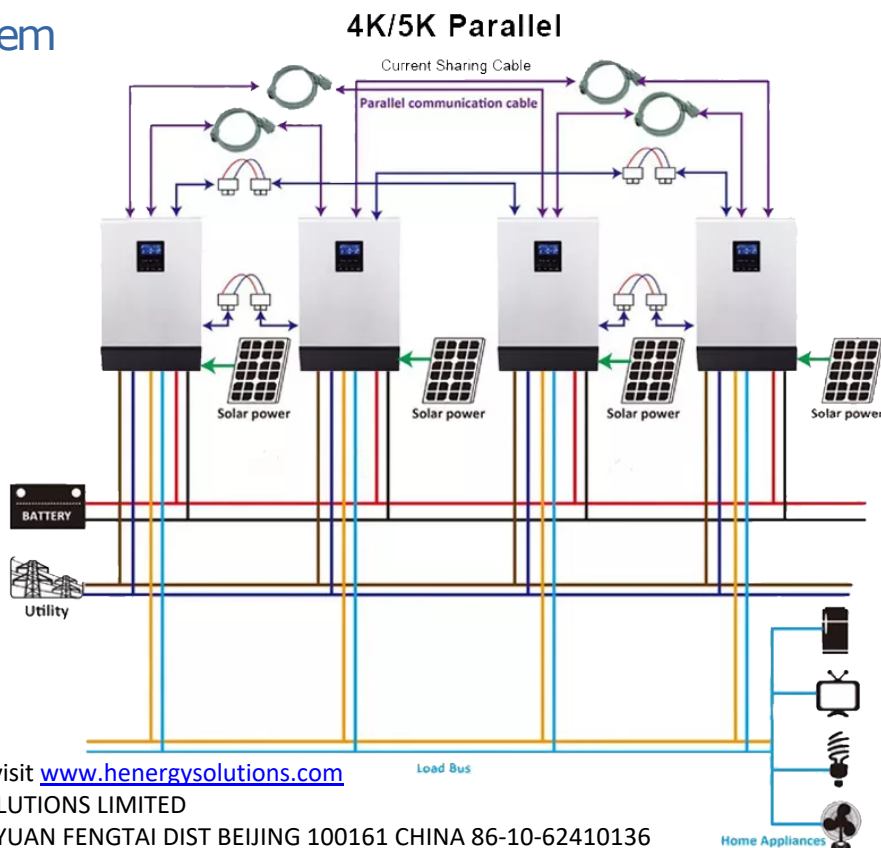
| Model No.           |  | MPS1K-24  | MPS3K-24                  |                       | MPS 5K                  |              |
|---------------------|--|---|---------------------------|-----------------------|-------------------------|--------------|
| Rated Power         |  | 1KVA/800W   | 3KVA/2400W                |                       | 5KVA/4000W              |              |
| Input               | Rated Voltage                                    | 230VAC  |                           |                       |                         |              |
|                     | Voltage selectable range (for Personal Computer) | 170~280 VAC   |                           |                       |                         |              |
|                     | Voltage selectable range (for home appliance)    | 90~280 VAC  |                           |                       |                         |              |
|                     | Frequency range                                  | 50Hz/60Hz (Auto sensing)                                  |                           |                       |                         |              |
| Output              | AC voltage Regulation (Batt.Mode)                | 230V AC ± 5%  |                           |                       |                         |              |
|                     |  | 230V AC ± 5%  |                           |                       |                         |              |
|                     | Surge Power                                      | 2000VA  | 6000VA                    |                       | 10000VA                 |              |
|                     | Efficiency (Peak)                                | 90%~93%   | 93%                       |                       |                         |              |
|                     | Transfer time                                    | 10ms (for personal computer)<br>20ms (for home appliance) |                           |                       |                         |              |
|                     | Wave form  | Pure sine wave  |                           |                       |                         |              |
| Battery& AC Charger | Battery voltage                                  | 24VDC   | 24VDC                     |                       | 48VDC                   |              |
|                     | Floating charge Voltage                          | 27VDC   | 27VDC                     |                       | 54VDC                   |              |
|                     | Overcharge Protection                            | 31VDC   | 31VDC                     |                       | 60VDC                   |              |
|                     | Maximum Charge Current                           | 10A/20A   | 20A or 30A                |                       | 10A/20A/30A/40A/50A/60A |              |
| PV Input            | Maximum PV Array Power                           | 600W  | 600W                      | 1500W                 | 3000W/4000W             |              |
|                     | MPPT Range @ Operating Voltage (VDC)             | 30~66   | 30~66VDC                  | 60V-115VDC            | 60~115VDC               |              |
|                     | Maximum PV Array Open Circuit Voltage            | 75 VDC  | 75 VDC                    | 145VDC                | 145VDC                  |              |
|                     | Maximum Charge Current                           | 25A   | 25A                       | 60A                   | 60A/80A                 |              |
|                     | Maximum Efficiency                               | 98%   |                           |                       |                         |              |
|                     | Standby Power Consumption                        | 2W  |                           |                       |                         |              |
|                     |  |   |                           |                       |                         |              |
| Physical            | Dimension, D×W×H (mm)                            | 128×272×355   |                           |                       | 140×295×540             |              |
|                     | Net Weight (Kgs)                                 | 7.4   | 8.0                       | 10                    | 11.05                   | 13.5         |
| Environmental       | Humidity   | 5%~95% Relative Humidity (Non-condensing)                 |                           |                       |                         |              |
|                     | Operation Temperature                            | 0°C~55°C  |                           |                       |                         |              |
|                     | Storage Temperature                              | -15°C~60°C  |                           |                       |                         |              |
| How to configure    | Model  | MPS1K-24  | MPS3K-24                  |                       | MPS 5K                  |              |
|                     | Inverter Power                                   | 800W  | 2400W                     |                       | 4000W                   |              |
|                     | Pmax. generated from solar charger               | 25Amp, 600W   | 25Amp, 600W               | 60Amp ,1500W          | 60Amp, 3000W            | 80Amp, 4000W |
|                     | Best Panel Configuration                         | 500Wp (250Wp×2pcs)  | 500Wp (250Wp × 2pcs/2pcs) | 1500Wp (250Wp × 6pcs) | 3000Wp (250Wp ×16pcs)   |              |

## Product introduction



1. LCD display
2. Status indicator
3. Charging indicator
4. Fault indicator
5. Function buttons
6. Power on/off switch
7. AC input
8. AC output
9. PV input
10. Battery input
11. Circuit breaker
12. RS232 communication port
13. Parallel communication cable (only for parallel model)
14. Current sharing cable (only for parallel model)
15. Dry contact

## Parallel System Diagram



To find out more visit [www.henergysolutions.com](http://www.henergysolutions.com)

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All specific cations and information are given with good intent, errors are possible and products may be subject to change without notice. Pictures may differ from actual products depending on local market re-quirements and regulations. A solar power system consists of a controller, inverter and load end. Multiple controllers/inverters are shown to represent the wide range that HES has.