

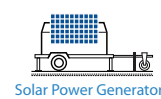
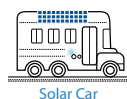
## Overview

UPower-Hi series, an upgrade hybrid inverter charger that supports utility charging, oil generator charging, solar charging, utility output, inverter output, and energy management. To maximize solar energy utilization, users can choose energy sources according to actual needs and flexibly take the utility as a supplement in the hybrid system. This inverter charger provides high-quality, high-stability, and high-reliability electric energy to the users by improving the solar system's power supply efficiency.



## Features

- Supports the battery mode or non-battery mode.
- Non-battery mode: charging with solar (Main) and utility (Assist) simultaneously.
- Surge and reverse connection protections to support the lithium battery system perfectly.
- Three charging modes: Solar only, Solar priority, Utility & Solar.
- Two AC output modes: Utility priority and Inverter priority.
- High tracking efficiency of MPPT no less than 99.5%.
- PFC technology achieves a high power factor of AC to DC charging and reduces grid capacity usage.
- Advanced SPWM technology and pure sine wave output.
- Customized charging current and discharging limited current.
- SOC with the self-learning feature is visible on LCD.
- 4.2 inch LCD to monitor and modify system parameters.
- Optional WiFi or GPRS Remote control by the RS485 isolated communication port.
- Optional BMS-Link port, which takes the charging and discharging control from BMS.



Item	UP3000-HM5042	UP5000-HM8042
Nominal battery voltage	48VDC	
Battery input voltage range	43.2~64VDC	
Max. battery charging current	50A	80A
<b>Inverter output</b>		
Continuous output power	3000W@30°C	5000W@30°C
Max. surge power	6000W	8000W
Output voltage range	220VAC(-6%~+3%), 230VAC(-10%~+3%)	
Output frequency range	50/60Hz±0.2%	
Output wave	Pure Sine Wave	
Load power factor	0.2-1 (VA ≤ continuous output power)	
Distortion THD	THD≤3% (Resistive load)	
80% rated output efficiency	92%	92%
Max. Rated output efficiency	90%	91%
Max. output efficiency	93%	93%
transfer time	10ms(UPS),15ms(appliances)	
<b>Utility charging</b>		
Utility input voltage range	176VAC~264VAC(Default) 90VAC~280VAC	Programmable
Utility input frequency range	40~65Hz	
Max. utility charge current	40A	60A
<b>Solar charging</b>		
Max. PV open circuit voltage	450V(At minimum operating environment temperature) 395V(25°C)	500V(At minimum operating environment temperature) 440V(25°C)
MPPT voltage range	80~350V	120~400V
Max. PV charge power	4000W	4000W
Max. PV charge current	50A	80A
Equalize charging voltage	53.0V(LFP15 default)	
Boost charging voltage	53.0V(LFP15 default)	
Float charging voltage	51.0V(LFP15 default)	
Low voltage disconnect voltage	47.8V(LFP15 default)	
Charging conversion efficiency	≤98%	
Tracking efficiency	≥99.5%	
Temperature compensate coefficient	-3mV/°C/2V (Default)	
<b>General</b>		
Surge current	56A	95A
Zero load consumption	<1.2A(without PV and utility connection, turn on the load output)	
Standby current	<0.7A(without PV and utility connection, turn off the load output)	
Enclosure	IP30	
Relative humidity	< 95%(N.C.)	
Working environment temperature	-20°C~50°C(When the working temperature reaches 30°C or above, the charging power and load power will be reduced appropriately; full load working is not supported.)	
Storage environment temperature	-25°C~60°C	
<b>Mechanical Parameters</b>		
Dimension(H x W x D)	607.5x381.6x149mm	642.5x381.6x149mm
Mounting size	585*300mm	620*300mm
Mounting hole size	Φ10mm	
Net Weight	15kg	19kg