

## Overview

UPower-Hi series is an inverter charger that supports diversified energy management modes on solar/utility/generator charging, and utility/inverter power supply to the AC loads. To maximize solar energy utilization, users can choose energy sources according to actual needs and flexibly take the utility as a supplement. This inverter charger can raise the system's power supply guarantee rate, which is suitable for solar energy, utility/oil generator hybrid systems. It aims to provide users with high-quality, high-stability, and high-reliability electrical energy.

## **Features**

- Supports the battery mode or non-battery mode
- Surge current 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 which achieves a high power factor of AC to DC charging and reduces the usage of power grid capacity
- Advanced SPWM technology and pure sine wave output
- Configurable battery charging current and discharging current
- · Configurable grid charging current
- Self-learning SOC function
- 4.2 inch LCD to monitor and modify system parameters
- Optional WiFi or GPRS Remote control via the RS485 isolated communication port
- · BMS-Link port and optional BMS-Link communication protocol module





















Item	UP2000-HM 6021	UP3000-HM10021	UP3000-HM 5041	UP3000-HM8041
Rated battery voltage	24\/	'DC	48\	/DC
Battery input voltage	21.6~32VDC		43.2~64VDC	
Max. battery charging current	60A	100A	50A	80A
Inverter output				
Continuous output pow er	2000W	3000W	3000W	3000W
Max. surge pow er(3S)	4000W	6000W	6000W	6000W
Output voltage range	110VAC(-3%~+3%), 120VAC(-10%~+3%)			
Output frequency	50/60±0.2%			
Output w ave	Pure Sine Wave			
Load pow er factor	0.2-1(Load pow er ≤ Continuous output pow er)			
Distortion THD	THD≤5%(Resistive load)			
80% rated output efficiency	89%	90%	91%	91%
Max. Rated output efficiency	88%	88%	90%	90%
Max. output efficiency	90%	92%	92%	92%
Sw itch time	10ms(Sw itch from the utility output to the inverter output), 15ms(Sw itch from the inverter output to the utility output)			
Utility charging	· 	. , , , , , , , , , , , , , , , , , , ,	·	
Utility input voltage		88VAC~132VAC (Default), 80	VAC~140VAC(Programmable)	
Utility input frequency	40~65Hz			
Max. utility charge current	60A	80A	40A	40A
Solar charging	OUA	OUA	40/4	404
Max. PV open circuit voltage	250V/∆t minimu	m operating environment temper	ature) 220V/(∆t 25°C environm	ent temperature)
, , , , , , , , , , , , , , , , , , , ,	250V(At minimum operating environment temperature), 220V(At 25°C environment temperature)  60~200V			
MPPT voltage range				
Max. PV input pow er				4000W
May DV charging now or	(Note: For the curve of Max. PV input power Vs. PV open-circuit voltage, see chapter 3.4 Operating mode for details.)  1725W 2875W 2875W 4000W			
Max. PV charging power	60A	100A	50A	80A
Max. PV charging current				
Equalize charging voltage	29.2V(AGM default) 58.4V(AGM default) 57.6V(AGM default)			
Boost charging voltage	,		,	
Float charging voltage	27.6V(AGM default)		55.2V(AGM default) 43.2V(AGM default)	
Low voltage disconnect voltage	, , ,			
Tracking efficiency	≥99.5% -3mV/°C/2V(Default)			
Temp. compensate coefficient  General		-3IIIV / C/2	v (Derauit)	
	F0.4	004	F0.A	054
Surge current	50A	60A	56A	95A
Zero load consumption	<1.6A	<1.6A	<1.2A	<0.8A
	(w ithout PV and utility connection, turn on the load output) <1.2A <1.0A <0.7A <0.6A			
Standby current	<1.2A		<0.7A	<0.6A
Mechanical Parameters	(w ithout PV and utility connection, turn off the load output)			
	007 5004 0407	040 5::004 0::440:::::	040 5004 0440	040 5004 0440
Dimension(H x W x D)	607.5x381.6x127mm	642.5x381.6x149mm	642.5x381.6x149mm	642.5x381.6x149mm
Mounting size	585*300mm	620*300mm	620*300mm	620*300mm
Mounting hole size	Ф10mm	Ф10mm	Ф10mm	Ф10mm
Net Weight	15kg 19kg 19kg 19kg 19kg			
Enclosure	< 95% (N.C.)			
Relative humidity	, ,			
Environment temperature	-20℃~50℃			

