

UPower-Hi Series Inverter/Charger

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-HM6021	UP3000-HM10021	UP3000-HM 5041	UP3000-HM8041
Rated battery voltage	24\/	/DC	48	VDC
Battery input voltage	21.6~32VDC		43.2~64VDC	
Max. battery charging current	60A	100A	50A	80A
Inverter output				
Continuous output power	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%
Switch time	10ms(Switch from the utility output to the inverter output), 15ms(Switch from the inverter output to the utility output)			
Utility charging				
Utility input voltage	88VAC~132VAC (Default), 80VAC~140VAC(Programmable)			
Utility input frequency	40~65Hz			
Max. utility charge current	60A	80A	40A	40A
Solar charging				
Max. PV open circuit voltage	250V(At minimu	m operating environment temper	ature), 220V(At 25℃ environm	nent temperature)
MPPT voltage range	60~200V			
Max. PV input power	2000W	3000W	3000W	4000W
	(Note: For the curve of Max	x. PV input pow er Vs. PV open-	circuit voltage, see chapter 3.4	Operating mode for details.)
Max. PV charging power	1725W	2875W	2875W	4000W
Max. PV charging current	60A	100A	50A	80A
Equalize charging voltage	29.2V(AGM default) 58.4V(AGM default)		GM default)	
Boost charging voltage	28.8V(AGM default) 57.6V(AGM default)			GM default)
Float charging voltage	27.6V(AGM default)		55.2V (A GM default)	
Low voltage disconnect voltage	21.6V(AGM default)		43.2V(AGM default)	
Tracking efficiency	≥99.5%			
Temp. compensate coefficient	-3mV/°C/2V(Default)			
General				
Surge current	50A	60A	56A	95A
Zero load consumption	<1.6A	<1.6A	<1.2A	<0.8A
		(without PV and utility connec	ction, turn on the load output)	
Standby current	<1.2A	<1.0A	<0.7A	<0.6A
		(without PV and utility connec	ction, turn off the load output)	
Mechanical Parameters				
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	Ф10тт
Net Weight	15kg	19kg	19kg	19kg
Enclosure	IP30			
Relative humidity	< 95% (N.C.)			
Environment temperature		-20°C	~50°C	