

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



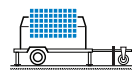
Solar Car



Solar Home



Solar Boat



Solar Power Generator

Item	UP2000-HM6021	UP3000-HM5041	UP2000-HM6022	UP3000-HM5042	UP3000-HM10022	UP5000-HM8042
Nominal battery voltage	24VDC	48VDC	24VDC	48VDC	24VDC	48VDC
Battery input voltage	21.6~32VDC	43.2~64VDC	21.6~32VDC	43.2~64VDC	21.6~32VDC	43.2~64VDC
Max. battery charging current	60A	50A	60A	50A	100A	80A
Inverter output						
Continuous output power	2000W	3000W	2000W	3000W	3000W	5000W
Max. surge power	4000W	6000W	4000W	6000W	6000W	8000W
Output voltage range	110VAC(-3%~+3%); 120VAC(-10%~+3%)	110VAC(-3%~+3%); 120VAC(-10%~+3%)	220VAC(-6%~+3%); 230VAC(-10%~+3%)	220VAC(-6%~+3%); 230VAC(-10%~+3%)	220VAC(-6%~+3%); 230VAC(-10%~+3%)	220VAC(-6%~+3%); 230VAC(-10%~+3%)
Output frequency range	50/60Hz±0.2%					
Output wave	Pure sine wave					
Load power factor	0.2-1(Load VA ≤ Continuous output power)					
Distortion THD	THD≤5% (Resistive load)	THD≤5% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)	THD≤3% (Resistive load)
80% rated output efficiency	89%	91%	92%	92%	92%	92%
Max. rated output efficiency	88%	90%	91%	90%	91%	91%
Max. output efficiency	90%	92%	93%	93%	93%	93%
Utility charging						
Utility input voltage	88VAC~132VAC (Default); 80VAC~140VAC (Programmable)	88VAC~132VAC (Default); 80VAC~140VAC (Programmable)	176VAC~264VAC (Default); 90VAC~280VAC (Programmable)	176VAC~264VAC (Default); 90VAC~280VAC (Programmable)	176VAC~264VAC (Default); 90VAC~280VAC (Programmable)	176VAC~264VAC (Default); 90VAC~280VAC (Programmable)
Utility input frequency	40~65Hz					
Max. utility charge current	60A	40A	60A	40A	80A	60A
Solar charging						
Max. PV open circuit voltage	250V(At minimum temperature); 220V(25°C)	250V(At minimum temperature); 220V(25°C)	450V(At minimum temperature); 395V(25°C)	450V(At minimum temperature); 395V(25°C)	450V(At minimum temperature); 395V(25°C)	500V(At minimum temperature); 440V(25°C)
MPPT voltage range	60~200V	60~200V	80~350V	80~350V	80~350V	120~400V
Max. PV input power	2000W	3000W	2500W	4000W	4000W	4000W
Max. PV charging power	1725W	2875W	1725W	2875W	2875W	4000W
Max. PV charging current	60A	50A	60A	50A	100A	80A
Equalize charging voltage	29.2V(AGM default)	58.4V(AGM default)	29.2V(AGM default)	58.4V(AGM default)	29.2V(AGM default)	58.4V(AGM default)
Boost charging voltage	28.8V(AGM default)	57.6V(AGM default)	28.8V(AGM default)	57.6V(AGM default)	28.8V(AGM default)	57.6V(AGM default)
Float charging voltage	27.6V(AGM default)	55.2V(AGM default)	27.6V(AGM default)	55.2V(AGM default)	27.6V(AGM default)	55.2V(AGM default)
Low voltage disconnect voltage	21.6V(AGM default)	43.2V(AGM default)	21.6V(AGM default)	43.2V(AGM default)	21.6V(AGM default)	43.2V(AGM default)
Tracking efficiency	≥99.5%					
Temperature compensate coefficient	-3mV/°C/2V (Default)					
General						
Surge current	50A	56A	50A	56A	60A	95A
Zero load consumption	<1.6A	<1.2A	<1.8A	<1.2A	<1.8A	<1.2A
	(without PV and utility connection, turn on the load output)					
Standby current	<1.2A	<0.7A	<1.2A	<0.7A	<1.2A	<0.7A
	(without PV and utility connection, turn off the load output)					
Dimension(HxWxD)	607.5x381.6x127mm	642.5x381.6x149mm	607.5x381.6x127mm	607.5x381.6x149mm	642.5x381.6x149mm	642.5x381.6x149mm
Net Weight	15kg	19kg	15kg	18kg	19kg	19kg
Operating temperature range	-20°C~50°C (derating above 30°C)					
Relative humidity	< 95%(N.C.)					
Enclosure	IP30					