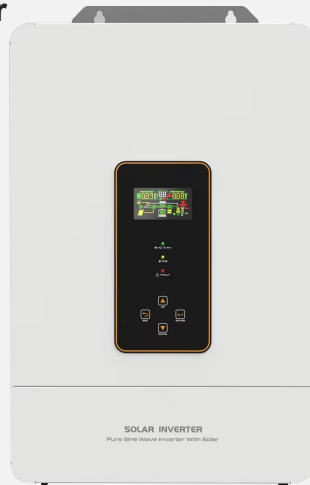


Kepler Series

Hybrid solar inverter with charger



KH5000-42



Overview

Kepler series is a new hybrid solar energy storage inverter control machine integrating solar energy storage, mains charging energy storage and AC sine wave output. It adopts DSP control and advanced control algorithm, and has the characteristics of high response speed, high reliability and high industrial standards. There are four charging modes: solar only, mains priority, solar priority and mains & solar power. Inverter and mains output modes are available to meet different application requirements.

The solar charging module adopts the latest optimized MPPT tracking technology, which can quickly track the maximum power point of the photovoltaic array in any environment, obtain the maximum energy of the solar panel in real time, and the MPPT voltage range is wide.

AC-DC charging module adopts advanced control algorithm to realize full digital voltage and current double closed-loop control, which has high control precision and small size. AC voltage input range is wide, input/output protection function is complete, stable and reliable to achieve battery charging and protection.

DC-AC inverter module based on full digital intelligent design, the use of advanced SPWM technology, output pure sine wave, direct current into alternating current, suitable for household appliances, power tools, industrial equipment, electronic audio and video and other AC load. The product uses segment LCD display design, real-time display system operating data and operating status. The comprehensive electronic protection function ensures the whole system is safer and more stable.

- Adopt full digital voltage and current double closed loop control, advanced SPWM technology, output pure sine wave.
- It has two output modes of mains bypass and inverter output, with uninterrupted power supply function.
- There are 4 charging modes to choose from: solar only, mains priority, solar priority, hybrid charging.
- Advanced MPPT technology, efficiency up to 99.9%.
- Wider MPPT voltage range.
- With solar and AC power activated lithium battery function, support lead-acid battery, lithium battery access.
- LCD screen design, 3 LED indicators, dynamic display of system data and operating status.
- With power saving mode function, reduce no-load loss.
- Intelligent adjustable fan, efficient heat dissipation, prolong system life.

Technical Parameters

Model		KH5000-42
Input	Input Sources	L+N+PE
	Rated Input Voltage	208/220/230/240Vac
	Rated Voltage (adjustable)	154~264Vac (APP mode) ; 185~264Vac (UPS mode)
	Frequency	50Hz/60Hz (Auto Adaptive)
Output	Rated Capacity	5000W
	Output Voltage	230Vac(208/220/230/240Vac adjustable)
	Output Frequency	Mains mode: Follows the mains frequency, Battery mode: 50/60Hz±0.3
	Waveform	Pure Sine Wave
	Transfer Time (adjustable)	10ms (UPS mode) ; 20ms (APP mode)
	Peak Power	10000VA
	Over Load Ability ((battery mode))	1min@102%~110% load;10s@110%~130% load;3s@130%~150%load;0.2s@>150% load
	Peak Efficiency	> 94%(Battery mode Rated input voltage)
Battery	Battery Voltage	48Vdc
	Constant charging (adjustable)	56.4Vdc
	Float charging(adjustable)	54Vdc
Charges	PV Charging Mode	MPPT
	MAX.PV Input Power	6000W
	MPPT Tracking Range	120V~500Vdc
	Best Voltage	300V~400Vdc
	MAX.PV Input Voltage	500Vdc
	MAX.PV Charging Current	100A
	MAX.AC Charging Current	80A
	MAX.Charging Current	100A
Display	LCD Display	Display Running Mode/Loads/Input/Output, etc.
Interface	USB Interface	Support WIFI/GPRS function
	Type-B Interface	Technical personnel debugging use
	Dry connect Interface	This dry contact can control the diesel generator switch to charge the battery
	RJ45 Interface	RS485 communication with lithium battery BMS
Appearance	Weight	9.4kg
	Dimensions	475*315*120.3mm
Environments	Operating Temperature	0°C~50°C
	Humidity	20°C~95°C (Non-condensing)
	Storage Temperature	-15°C~60°C
	Altitude	Altitude not over 1000m, Derating over 1000m, Max 4000m, Refer to IEC62040
	Noise	≤50db