

OFF-Grid Rack Mounted Solar Inverter



Feature

- 1> Adopt standard 3U rack structure design, especially suitable for use with lithium batteries
- 2> Pure sine wave output, can meet the use of various types of loads
- 3> The maximum PV open circuit voltage is 450V, when the energy is sufficient, it can be loaded without the battery
- 4> Built-in MPPT solar controller
- 5> With multi-mode setting function, the priority level of photovoltaic, utility power and battery can be selected and set through the LCD screen
- 6> It has a wide range of mains input voltage, which can be selected through LCD to meet different power requirements
- 7> With battery over-discharge, overload protection, over-temperature protection, short-circuit protection and other protection functions
- 8> When the battery is discharged and the inverter is turned off, the inverter will automatically turn on when the photovoltaic or mains power is restored.
- 9> With cold start function; support USB, RS485 monitoring function
- 10> WIFI intelligent monitoring function, support mobile APP to view various data (optional)

Product Introduction

The Smart HRT series inverters are designed with a standard 3U rack-mounted structure, which is easy to use with lithium battery packs and saves space. The inverter is a pure sine wave solar inverter control integrated machine; the controller adopts advanced MPPT calculation method and intelligent battery management to ensure maximum energy acquisition, with a wide PV input range, when the energy is sufficient It can be loaded without the battery; at the

same time, it adopts high-frequency design, which has the advantages of high-power density, simple operation, high efficiency of the whole machine, and low no-load loss. It integrates the functions of solar energy, mains power and battery 3 in 1 to provide a steady supply of energy for lighting, computers, TVs and other household appliances and power tools, as well as small-power industrial electrical equipment.

Specifications

MODEL	Smart HRT 3024	Smart HRT 3048	Smart HRT5048
Rated Capacity	3000VA/3000W		5000VA/5000W
INPUT			
Input Format	L+N+PE		
Rated input voltage	208/220/230/240VAC		
Voltage Range	170~280VAC(For Personal computers); 90~280VAC(For Home Appliances)		
Frequency Range	50Hz/60Hz(Auto sensing)		
OUTPUT			
Output Format	L+N+PE		
Rated output voltage	208/220/230/240VAC ± 5%		
Output frequency	50/60Hz ± 0.1%		
Waveform	Pure sine wave		
Transfer Time	10ms(For Personal computers), 10ms(For Home Appliances)		
Peak Power	6000VA	6000VA	10000VA
Overload Capacity (Battery Mode)	1min@102%~110% Load 10s@110%~130%Load 3s@130%~150% Load 200ms@>150% Load		
Peak Efficiency (Battery Mode)	>93%	>94%	>94%
BATTERY			
Rated voltage	24 VDC	48 VDC	
Constant voltage charging voltage (can be set)	28.2 VDC	56.4 VDC	
Float charging voltage (can be set)	27 VDC	54 VDC	
SOLAR CHARGER & AC CHARGER			
Solar Charger	MPPT	MPPT	MPPT
PV maximum input power	4000W	4000W	5500W
MPPT tracking range	120~430 VDC	120~430 VDC	120~430 VDC
Maximum PV input voltage	450 VDC	450 VDC	450 VDC
Maximum PV Charge Current	80 A	80 A	80 A
Maximum mains charging current	60 A	60 A	80 A
Maximum charging current	80 A	80 A	80 A
Communication Interface			
RS232	5PIN/Pitch2.0mm, baud rate 2400		
Expansion slot communication interface	2× 5PIN/Pitch2.54mm, Lithium battery BMS communication card, WIFI card, dry contact card, etc.		
Parallel interface	No parallel		With parallel
Environmental Parameters			
Operating ambient temperature	0~40℃		
Operating environment humidity	20%~95% (Non-condensing)		
Storage temperature	-15~60℃		
Altitude	Altitude should not exceed 1000m, derating above 1000m, maximum 4000m, refer to IEC62040		
Noise	≤50db		
Physical parameters			
D × W × H(mm)	405 × 483 × 133.5		
Weight (net weight)	7kg	7kg	7.8kg
Standards and Certifications	EN-IEC 60335-1, EN-IEC 60335-2-29, IEC 62109-1		