

3000W

HYBRID INVERTER

MODEL: RS-H3048



FEATURES

- 24V/48V battery system
- Pure sine wave output 3KW
- Inbuilt MPPT 80A
- High frequency inverter with small size and light weight
- Overload, short circuit and deep discharge protection
- Compatible to mains voltage or generator power
- Parallel operation up to 6 unit
- With CAN/RS485 for BMS communication
- WIFI/ GPRS remote monitoring (optional)

Table 1: Line Mode Specifications

MODEL	RS-H3048
Input Voltage Waveform	Sinusoidal (utility or generator)
Nominal Input Voltage	120VAC
Low Loss Voltage	95VAC±5V (UPS); 65VAC±5V (Appliances)
Low Loss Return Voltage	100VAC±5V (UPS); 70VAC±5V (Appliances)
High Loss Voltage	140VAC±5V
High Loss Return Voltage	135VAC±5V
Max AC Input Voltage	150VAC
Nominal Input Frequency	50Hz / 60Hz (Auto detection)
Low Loss Frequency	40±1Hz
Low Loss Return Frequency	42±1Hz
High Loss Frequency	65±1Hz
High Loss Return Frequency	63±1Hz
Output Short Circuit Protection	Circuit Breaker
Efficiency (Line Mode)	>95% (Rated R load, battery full charged)
Transfer Time	10ms Typical, 20ms Max@ Single <30ms@ Parallel

Output power derating:

When AC input voltage drops to 95V, the output power will be derated.

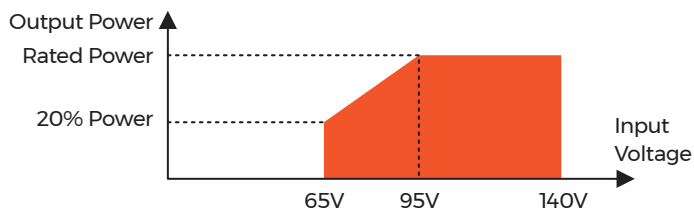


Table 2: Inverter Mode Specifications

MODEL	RS-H3048
Rated Output Power	3000VA/3000W
Output Voltage Waveform	Pure Sine Wave
Output Voltage Regulation	120VAC±5%
Output Frequency	50Hz / 60Hz (Default)
Peak Efficiency	90%
Overload Protection	5s@≥150% Load; 10s@110%-150% Load
Surge Capacity	2*Rated Power For 5 Seconds
Nominal DC Input Voltage	48VDC
Cold Start Voltage	46.0VDC

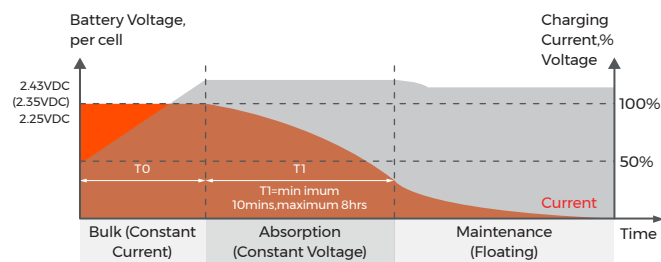
Cold Start SOC (Li Mode)	Default 30%, Low DC Cut-off SOC+10%
Low DC Warning Voltage	
@Load<20%	44.0VDC
@20%≤Load<50%	42.8VDC
@Load≥50%	40.4VDC
Low DC Warning Return Voltage	
@Load<20%	46.0VDC
@20%≤Load<50%	44.8VDC
@Load≥50%	42.4VDC
Low DC Cut-off Voltage	
@Load<20%	42.0VDC
@20%≤Load<50%	40.8VDC
@Load≥50%	38.4VDC
Low DC Cut-off Voltage(Li Mode)	42.0VDC
Low DC Warning SOC(Li Mode)	Low DC Cut-off SOC +5%
Low DC Warning Return SOC (Li Mode)	Low DC Cut-off SOC +10%
Low DC Cut-off SOC(Li Mode)	Default 20%, 5%~50% settable
High DC Recovery Voltage	56.4VDC(C.V. charging voltage)
High DC Cut-off Voltage	60.8VDC
No Load Power Consumption	<50W

Table 3: Charge Mode Specifications

Utility Charging Mode

MODEL	RS-H3048
Charging Current (UPS) @ Nominal Input Voltage	Default: 30A, max 40A
Bulk Charging Voltage	
Flooded Battery	58.4VDC
AGM / Gel Battery	56.4VDC
Floating Charging Voltage	54VDC
Overcharge Protection	60VDC
Charging Algorithm	3-Step

Charging Curve



Solar Input

Efficiency	98.0% Max.
Max. PV Array Open Circuit Voltage	145VDC
PV Array MPPT Voltage Range	60VDC~115VDC
Min Battery Voltage for PV Charge	34VDC
Max. PV Charging Current	80A
Battery Voltage Accuracy	±0.3%
PV Voltage Accuracy	±2V
Joint Utility and Solar Charging	
Max Charging Current	120Amp
Default Charging Current	60Amp

Table 4: General Specifications

MODEL	RS-H3048
Safety Certification	CE
Operating Temperature Range	0°C to 55°C
Storage Temperature	-15°C~ 60°C
Humidity	5% to 95% Relative Humidity (Non-condensing)
Dimension	17.9x13.8x5.1 inches / 455x350x130 mm
Net Weight	11.5(kg)/25.4(lb)