

6500W HYBRID OFF-GRID INVERTER



FEATURES

- Pure sine wave inverter
- Configurable color with the built-in RGB LED bar
- Built-in Wi-Fi for mobile monitoring (APP is required)
- Supports USB On-the-Go function
- Built-in anti-dust kit
- Detachable LCD control module with multiple communication ports for BMS (RS485, CAN-BUS, RS232)
- Configurable input voltage ranges for home appliances and personal computers via LCD control panel
- Configurable AC/PV output usage timer and prioritization
- Configurable AC/Solar charger priority via LCD control panel
- Configurable battery charging current based on applications via LCD control panel
- Compatible to utility mains or generator power
- Auto restart while AC is recovering
- Overload / Over temperature / short circuit protection
- Smart battery charger design for optimized battery performance
- Cold start function

**550V
PV INPUT**

Table 1: Line Mode Specifications

MODEL	RS-H6548
Input Voltage Waveform	Sinusoidal (utility or generator)
Nominal Input Voltage	120VAC
Low Loss Voltage	90VAC±7V (UPS); 80VAC±7V (Appliances)
Low Loss Return Voltage	100VAC±7V (UPS); 90VAC±7V (Appliances)
High Loss Voltage	140VAC±7V
High Loss Return Voltage	135VAC±7V
Max AC Input Voltage	150VAC
Max AC Input Current	60A
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	Line mode: Circuit Breaker (70A) Battery mode: Electronic Circuits
Efficiency (Line Mode)	>95% (Rated R load, battery full charged)
Transfer Time	10ms typical (UPS); 20ms typical (Appliances)

Power Limitation

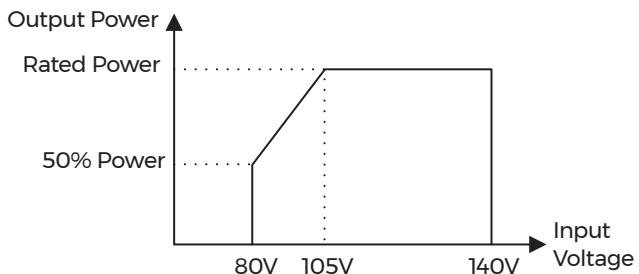


Table 2: Inverter Mode Specifications

MODEL	RS-H6548
Rated Output Power	6500W
Output Voltage Waveform	Pure Sine Wave
Output Voltage Regulation	120VAC±5%
Output Frequency	60Hz or 50Hz
Peak Efficiency	91%
Overload Protection	100ms@≥205% load; 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

Low DC Warning Voltage

@ load < 20% 46.0VDC

@ 20% ≤ load < 50% 42.8VDC

@ load ≥ 50% 40.4VDC

Low DC Warning Return Voltage

@ load < 20% 48.0VDC

@ 20% ≤ load < 50% 44.8VDC

@ load ≥ 50% 42.4VDC

Low DC Cut-off Voltage

@ load < 20% 44.0VDC

@ 20% ≤ load < 50% 40.8VDC

@ load ≥ 50% 38.4VDC

High DC Recovery Voltage

64VDC

High DC Cut-off Voltage

66VDC

DC Voltage Accuracy +/-0.3V@ no load

THDV <5% for linear load, <10% for non-linear load @ nominal voltage

DC Offset ≤100mV

Table 3: Charge Mode Specifications
Utility Charging Mode

MODEL RS-H6548

Charging Current (UPS) @ Nominal Input Voltage 120A

Bulk Charging Voltage

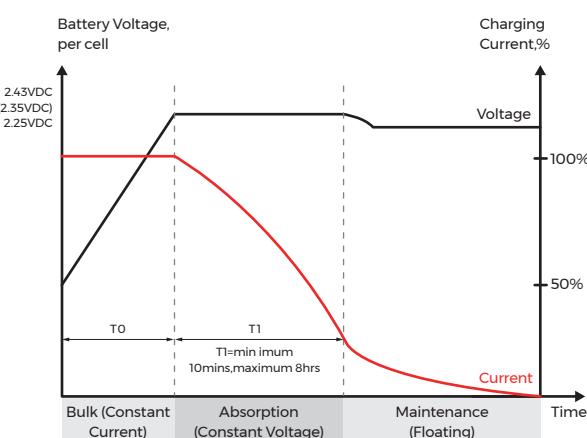
Flooded Battery 58.4VDC

AGM / Gel Battery 56.4VDC

Floating Charging Voltage 54VDC

Overcharge Protection 66VDC

Charging Algorithm 3-Step

Charging Curve

Solar Input

MODEL RS-H6548

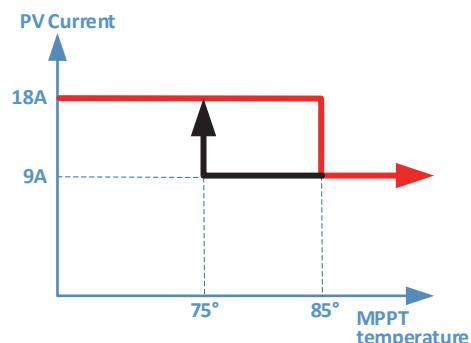
Rated Power 8000W

Max. PV Array Open Circuit Voltage 550VDC

PV Array MPPT Voltage Range 90VDC-450VDC

Max. Input Current 18A x 2

Start-up Voltage 80V +/- 5VDC

Power Limitation

Table 4: General Specifications

MODEL RS-H6548

Safety Certification UL 1741 by TUV

Operating Temperature Range -10°C to 40°C

Storage temperature -15°C~ 60°C

Humidity 5% to 95% Relative Humidity (Non-condensing)

Dimension (mm) 147.4 x 432.5 x 553.6

Net Weight (kg) 18.4

Table 5: Parallel Specifications (Parallel model only)

Max parallel numbers 6

Circulation Current under No Load Condition Max 2A

Power Unbalance Ratio <5% @ 100% Load

Parallel communication CAN

Transfer time in parallel mode Max 50ms

Parallel Kit YES

Note: Parallel feature will be disabled when only PV power is available