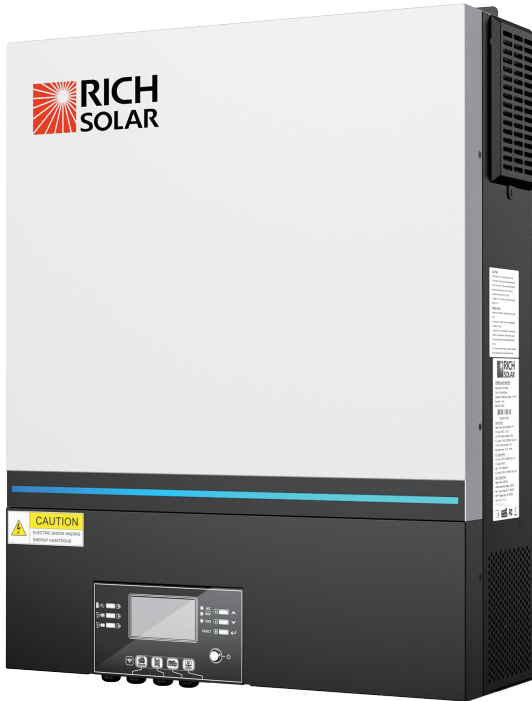


**550V
PV INPUT**

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-dusk 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

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 | |

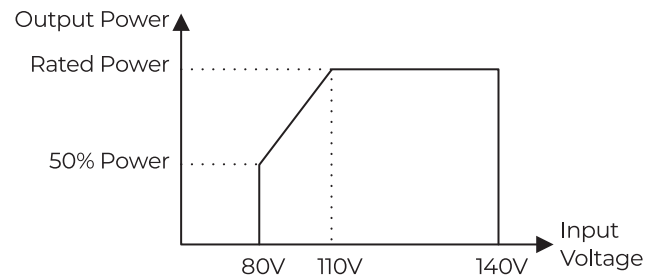


Table 2: Inverter Mode Specifications

| | |
|---------------------------|--|
| 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 62VDC

High DC Cut-off Voltage 63VDC

DC Voltage Accuracy +/-0.3V@ no load

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

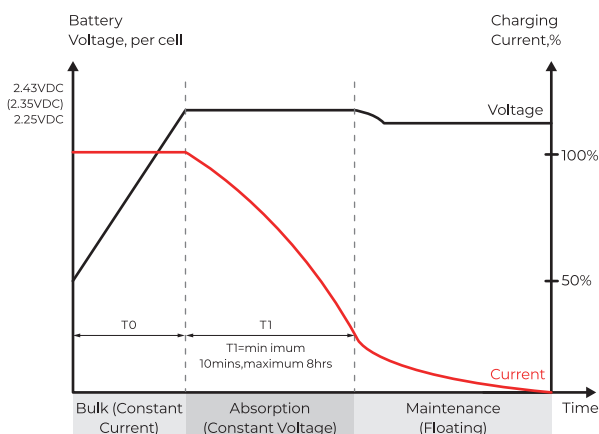
DC Offset ≤100mV

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

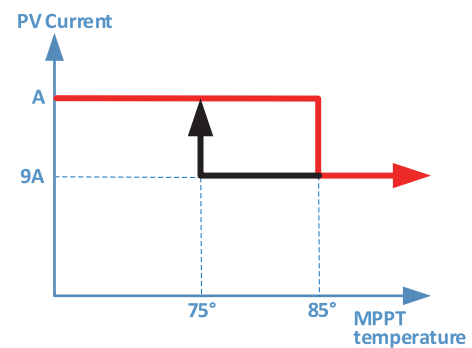


Table 4: General Specifications

| | |
|-----------------------------|--|
| 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 575.6 (620.6) (with extension box) |
| 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