



Hybrid Inverter

HS5-12KRH-W

Flexible Design & Use | Energy Independence |
Convenient Installation & Operation | Smart Management

1

Flexible Design & Use

- DC 16A current input, compatible with high power PV module.
- Supports application in retrofit scenario.
- UPS switching time <10ms.

2

Energy Independence

- Fast charging / discharging to meet the demand of higher consumption.
- 110% continuous AC output overloading.
- 130% max. AC output overloading@85s.

3

Convenient Installation & Operation

- Unique push-in connectors for time-saving installation.
- Touch free commissioning with smartphone.
- Compact size and elegant appearance.

4

Smart Management

- Remote firmware update and customizable settings.
- Free online monitoring to enhance energy management for end user, installer and retailer.
- Programmable supply priority for PV, Battery or Grid.

MODEL	HS5KRH-W	HS6KRH-W	HS8KRH-W	HS10KRH-W	HS12KRH-W
PV (DC)					
Recommended Max. PV Input Power	7500 Wp	9000 Wp	10000 Wp	15000 Wp	18000 Wp
Max. Input Voltage*			1000 V		
Start-up Voltage			135 V		
Rated Input Voltage			600 V		
MPPT Input Voltage Range*			135-900 V		
MPPT Max. Input Current	16 A / 16 A				16 A / 32 A
MPPT Short-circuit Current	20 A / 20 A				20 A / 40 A
No. of MPPT			2		
No. of Strings per MPPT	1 / 1				1 / 2
Grid (AC)					
Max. Input Apparent Power**	10000 VA	12000 VA	16000 VA	20000 VA	24000 VA
Rated Output Power	5000 W	6000 W	8000 W	10000 W	12000 W
Max. Output Apparent Power	5500 VA	6600 VA	8800 VA	11000 VA	13200 VA
Rated AC Voltage	3L/N/PE, 220/380 V, 230/400 V, 240/415 V				
Input/Output Voltage Range	180-300 V / 200-253 V				
Rated Output Voltage Frequency	50 / 60 Hz				
Input/Output Voltage Frequency Range	(45-55) / (55-65) Hz				
Rated Output Current	7.2 A	8.7 A	11.6 A	14.5 A	17.4 A
Max. Input/Output Current	15.2 A / 9.8 A	18.2 A / 11.8 A	24.2 A / 15.8 A	30.3 A / 19.7 A	36.4 A / 23.6 A
Power Factor (Rated)	>0.99				
Adjustable Power Factor Range	0.8 leading ... 0.8 lagging				
Total Harmonic Distortion	<3% (Rated Power)				
Grid Connection Mode	3L/N/PE				
AC Load Output (Off-grid)					
Rated Output Power	5000 W	6000 W	8000 W	10000 W	12000 W
Max. Output Apparent Power	5500 VA	6600 VA	8800 VA	11000 VA	13200 VA
Rated Output Voltage	3L/N/PE, 220/380 V, 230/400 V, 240/415 V				
Output Voltage Range	200-240 V				
Rated Output Frequency	50/60 Hz				
Rated Output Current	7.2 A	8.7 A	11.6 A	14.5 A	17.4 A
Max. Output Current	9.8 A	11.8 A	15.8 A	19.7 A	23.6 A
Total Harmonic Distortion	< 3% (R Load)				
On-grid/Off-grid Switching Time	< 10 ms				
Battery (DC)					
Rated Output Power	5000 W	6000 W	8000 W	10000 W	12000 W
Max.Charge/Discharge Power	12500 W / 5500 W	12500 W / 6600 W	12500 W / 8800 W	12500 W / 11000 W	12500 W / 13200 W
Battery Voltage Range	135-800 V				
Max. Charge/Discharge Current	25 A / 25 A	25 A / 25 A	25 A / 25 A	25 A / 25 A	25 A / 25 A
Communication Port	CAN / RS485				
Efficiency					
Max. Efficiency	97.6%				
Max. MPPT Efficiency	99.9%				
Max. European Efficiency	97.0%				
Protection					
Integrated Protection	Anti-flow Protection, DC Reverse Protection, DC Circuit Breaker, Insulation Resistor Detection, Leakage Current Monitoring, Output Shorted Protection, Output Over Current Protection, Grid Monitoring, Anti-islanding Protection, Residual Current Monitoring, Reverse Polarity Protection, Off-grid Overload Protection.				
Surge Protection	DC Type II, AC Type II				
Display and Communication					
Display	LED+APP				
Communication	Yes: RS485 / USB , Optional: 4G / WiFi				
General Data					
Dimensions (W×H×D)	516×442×222 mm				
Weight	24 kg				
Operating Temperature Range	-30~60°C				
Noise	<35 dB				
Cooling	Smart Cooling				
Installation Style	Wall-mounted				
Protection Rating	IP66				
Warranty	10 Years				
Standards Compliance					
Grid Connection	EN 50549-1, CEI 0-21, AS 4777.2, G98/G99, EN 50438, VDE 4105, VDE 0126				
Safety Regulation	IEC/EN 62109-1/2				
Others	IEC/EN 61000-6-1/2/3/4				

* Max. DC input voltage is 1000V without battery, 850V with battery. If the voltage is greater than the maximum, the inverter is in standby state.

** Max. grid input power refers to the max. power drawn from the grid, including the supply of off-grid load and battery charging.