



Model Numbers

STR2-KMS5000-48P

Inverter add-ons



Parallel connection kits

KMS-PARKITT-48

KMS-PARKIT-24

parallel kit is suitable for linking identical Strahl inverters in series or parallel.



Wi-Fi monitoring kit

IC-WIFI

Wi-Fi remote monitoring kit uses Wi-Fi connectivity to enable advanced remote monitoring of a Strahl hybrid inverter from any location in the world.



Wi-Fi mobile app module

IC-WIFI-2

Wi-Fi remote monitoring module uses Wi-Fi connectivity to enable advanced remote monitoring of an Strahl hybrid inverter from an Android or iOS mobile device.



RS-485 modbus card

IC-MODBUS

Modbus card enables communication between compatible Strahl inverters and the energy meter in a grid-tie system.

SPECIFICATIONS

Table 1 Line Mode Specifications

INVERTER MODEL	5KVA	5KVA Plus
Input Voltage Waveform	Sinusoidal (utility or generator)	
Nominal Input Voltage	230Vac	
Low Loss Voltage	170Vac±7V (UPS) 90Vac±7V (Appliances)	
Low Loss Return Voltage	180Vac±7V (UPS); 100Vac±7V (Appliances)	
High Loss Voltage	280Vac±7V	
High Loss Return Voltage	270Vac±7V	
Max AC Input Voltage	300Vac	
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 Battery mode: Electronic Circuits	
Efficiency (Line Mode)	>95% (Rated R load, battery full charged)	
Transfer Time	10ms typical (UPS); 20ms typical (Appliances)	
<p>Output power derating: When AC input voltage drops to 95V or 170V depending on models, the output power will be derated.</p>	<p>The graph illustrates the output power derating characteristics. The vertical axis represents Output Power, and the horizontal axis represents Input Voltage. The power remains constant at the Rated Power level until the input voltage reaches 170V. Below 170V, the power derates linearly, reaching 50% of the Rated Power at 90V. From 90V to 280V, the output power remains constant at 50% of the Rated Power.</p>	

Table 2 Inverter Mode Specifications

INVERTER MODEL	5KVA	5KVA Plus
Rated Output Power	5KVA/5KW	
Output Voltage Waveform	Pure Sine Wave	
Output Voltage Regulation	230Vac±5%	
Output Frequency	60Hz or 50Hz	
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	
Low DC Warning Voltage @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	44.0Vdc 42.8Vdc 40.4Vdc	
Low DC Warning Return Voltage @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	46.0Vdc 44.8Vdc 42.4Vdc	
Low DC Cut-off Voltage @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	42.0Vdc 40.8Vdc 38.4Vdc	
High DC Recovery Voltage	64Vdc	
High DC Cut-off Voltage	66Vdc	

Table 3 Charge Mode Specifications

Utility Charging Mode		
INVERTER MODEL	5KVA	5KVA Plus
Charging Current (UPS) @ Nominal Input Voltage		100A
Bulk Charging Voltage	Flooded Battery	58.4
	AGM / Gel Battery	56.4
Floating Charging Voltage		54Vdc
Overcharge Protection		66Vdc
Charging Algorithm		3-Step
Charging Curve		
Solar Input		
INVERTER MODEL	5KVA	5KVA Plus
Rated Power	4500W	6000W
Max. PV Array Open Circuit Voltage	450Vdc	
PV Array MPPT Voltage Range	120Vdc~430Vdc	
Max. Input Current	18A	27A

Table 4 General Specifications

INVERTER MODEL	5KVA	5KVA Plus
Safety Certification	CE	
Operating Temperature Range	-10°C to 50°C	
Storage temperature	-15°C~ 60°C	
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Dimension (D*W*H), mm	120 x 295 x 468	
Net Weight, kg	11	