



Model Numbers

STR-KMS5000-24

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	3KVA	5KVA
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 plots Output Power on the vertical axis against Input Voltage on the horizontal axis. The horizontal axis has markers at 90V, 170V, and 280V. The vertical axis has markers for 50% Power and Rated Power. The power starts at 50% at 90V, rises linearly to reach Rated Power at 170V, and then remains constant at Rated Power until 280V.</p>	

Table 2 Inverter Mode Specifications

INVERTER MODEL	3KVA	5KVA
Rated Output Power	3KVA/2.4KW	5KVA/4KW
Output Voltage Waveform	Pure Sine Wave	
Output Voltage Regulation	230Vac±5%	
Output Frequency	50Hz or 60Hz	
Peak Efficiency	90%	
Overload Protection	5s@≥150% load; 10s@110%~150% load	
Surge Capacity	2* rated power for 5 seconds	
Nominal DC Input Voltage	24Vdc	
Cold Start Voltage	23.0Vdc	
Low DC Warning Voltage @ load < 20% @ load ≥ 20%	22.0Vdc 21.4Vdc	
Low DC Warning Return Voltage @ load < 20% @ load ≥ 20%	23.0Vdc 22.4Vdc	
Low DC Cut-off Voltage @ load < 20% @ load ≥ 20%	21.0Vdc 20.4Vdc	
High DC Recovery Voltage	29Vdc	29Vdc
High DC Cut-off Voltage	30Vdc	30Vdc
No Load Power Consumption	<75W	<130W
Saving Mode Power Consumption	<35W	<50W

Table 3 Charge Mode Specifications

Utility Charging Mode		
INVERTER MODEL	3KVA	5KVA
Charging Current (UPS) @ Nominal Input Voltage	30A	
Bulk Charging Voltage	Flooded Battery	29.2
	AGM / Gel Battery	28.2
Floating Charging Voltage	27Vdc	
Overcharge Protection	30Vdc	30Vdc
Charging Algorithm	3-Step	
Charging Curve		

Solar Charging Mode (MPPT type)		
INVERTER MODEL	3KVA	5KVA
Rated Power	1000W	2000W
Maximum charging current	40A	80A
Efficiency	98.0% max.	
Max. PV Array Open Circuit Voltage	100Vdc	145Vdc
PV Array MPPT Voltage Range	30~80Vdc	30~115Vdc
Battery Voltage Accuracy	+/-0.3%	
PV Voltage Accuracy	+/-2V	
Charging Algorithm	3-Step	

Joint Utility and Solar Charging		
Max Charging Current	100A	140A
Default Charging Current	60A	

Solar Charging Mode (PWM type)		
INVERTER MODEL	3KVA	5KVA
Rated Power	1200W	
Maximum charging current	50A	
Efficiency	98.0% max.	
Max. PV Array Open Circuit Voltage	75Vdc	
Operation Voltage Range	30Vdc ~ 40Vdc	
Battery Voltage Accuracy	+/-0.3%	
PV Voltage Accuracy	+/-2V	
Charging Algorithm	3-Step	
Joint Utility and Solar Charging		
Max Charging Current	110A	
Default Charging Current	60A	

Table 4 General Specifications

INVERTER MODEL	3KVA		5KVA	
SCC type	MPPT	PWM	MPPT	PWM
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 (D*W*H), mm	100x272x385		180x310x475	
Net Weight, kg	7.5	7.0	12.5	11.5