

## Model Numbers

# STR4-KMS6000-48

### 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	3.6KW	5.6KW
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)	
Output power derating: When AC input voltage drops to 95V or 170V depending on models, the output power will be derated.	<p>The graph illustrates the output power derating characteristic. The vertical axis represents Output Power, with a horizontal dashed line for Rated Power and a lower horizontal dashed line for 50% Power. The horizontal axis represents Input Voltage, with vertical dashed lines at 90V, 170V, and 280V. The power remains constant at the Rated Power level from 170V up to 280V. Between 170V and 90V, the output power decreases linearly from Rated Power to 50% Power. Below 90V, the output power is zero.</p>	

Table 2 Inverter Mode Specifications

<b>INVERTER MODEL</b>	<b>3.6KW</b>	<b>5.6KW</b>
<b>Rated Output Power</b>	3.6KVA/3.6KW	5.6KVA/5.6KW
<b>Output Voltage Waveform</b>	Pure Sine Wave	
<b>Output Voltage Regulation</b>	230Vac±5%	
<b>Output Frequency</b>	60Hz or 50Hz	
<b>Peak Efficiency</b>	90%	
<b>Overload Protection</b>	5s@≥150% load; 10s@110%~150% load	
<b>Surge Capacity</b>	2* rated power for 5 seconds	
<b>Nominal DC Input Voltage</b>	48Vdc	
<b>Cold Start Voltage</b>	46.0Vdc	
<b>Low DC Warning Voltage</b> @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	44.0Vdc 42.8Vdc 40.4Vdc	
<b>Low DC Warning Return Voltage</b> @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	46.0Vdc 44.8Vdc 42.4Vdc	
<b>Low DC Cut-off Voltage</b> @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	42.0Vdc 40.8Vdc 38.4Vdc	
<b>High DC Recovery Voltage</b>	64Vdc	
<b>High DC Cut-off Voltage</b>	66Vdc	

Table 3 Charge Mode Specifications

Utility Charging Mode		
INVERTER MODEL	3.6KW	5.6KW
<b>Charging Current (UPS)</b> @ Nominal Input Voltage	100A	120A
<b>Bulk Charging Voltage</b>	<b>Flooded Battery</b>	58.4
	<b>AGM / Gel Battery</b>	56.4
<b>Floating Charging Voltage</b>	54Vdc	
<b>Overcharge Protection</b>	66Vdc	
<b>Charging Algorithm</b>	3-Step	
<b>Charging Curve</b>	<p>The graph illustrates the charging process for a battery cell. The left y-axis represents Battery Voltage (per cell) in Vdc, with markers at 2.25Vdc and 2.43Vdc (2.35Vdc). The right y-axis represents Charging Current in percentage, with markers at 50% and 100%. The x-axis represents Time. The charging curve is divided into three stages: Bulk (Constant Current), Absorption (Constant Voltage), and Maintenance (Floating). The Bulk stage is characterized by a constant current (red line) and a linear increase in voltage (black line) until it reaches 2.43Vdc. The Absorption stage is characterized by a constant voltage (black line) and a decreasing current (red line) until it reaches 2.25Vdc. The Maintenance stage is characterized by a constant voltage (black line) and a very low, constant current (red line). Time intervals T0 and T1 are marked, with T1 = 10 * T0, minimum 10mins, maximum 8hrs.</p>	
Solar Charging Mode (MPPT type)		
INVERTER MODEL	3.6KW	5.6KW
<b>Rated Power</b>	5000W	6000W
<b>Max. Charging Current</b>	100A	120A
<b>Max. PV Array Open Circuit Voltage</b>	500Vdc	450Vdc
<b>PV Array MPPT Voltage Range</b>	120Vdc~430Vdc	
<b>Max. Input Current</b>	18A	27A

Table 4 General Specifications

INVERTER MODEL	3.6KW	5.6KW
<b>Safety Certification</b>	CE	
<b>Operating Temperature Range</b>	-10°C to 50°C	
<b>Storage temperature</b>	-15°C~ 60°C	
<b>Humidity</b>	5% to 95% Relative Humidity (Non-condensing)	
<b>Dimension (D*W*H), mm</b>	140 x 295 x 468	
<b>Net Weight, kg</b>	11	12