



Model Numbers

STR-MX8000-48

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

MODEL	8KW
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
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)
<p>Output power de-rating: When AC input voltage under 170V the output power will be de-rated.</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 graph shows a constant output power of 50% from 0V to 90V. From 90V to 170V, the output power increases linearly to reach the Rated Power level. From 170V to 280V, the output power remains constant at the Rated Power level. Vertical dashed lines connect the 90V, 170V, and 280V points on the x-axis to the corresponding points on the graph line. Horizontal dashed lines connect the 50% Power and Rated Power points on the y-axis to the graph line.</p>

Table 2 Inverter Mode Specifications

MODEL	8KW
Rated Output Power	8000W
Output Voltage Waveform	Pure Sine Wave
Output Voltage Regulation	230Vac±5%
Output Frequency	60Hz or 50Hz
Peak Efficiency	93%
Overload Protection	100ms@≥205% load;5s@≥150% load; 10s@110%~150% load
Surge Capacity	2* rated power for 5 seconds
Optional 12V DC Output	
DC Output	12 VDC ± 7%, 100W
High DC Cut-off Voltage	66Vdc
Low DC Cut-off Voltage	44Vdc
Nominal DC Input Voltage	48Vdc
Cold Start Voltage	46.0Vdc
Low DC Warning Voltage @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	46.0Vdc 42.8Vdc 40.4Vdc
Low DC Warning Return Voltage @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	48.0Vdc 44.8Vdc 42.4Vdc
Low DC Cut-off Voltage @ load < 20% @ 20% ≤ load < 50% @ load ≥ 50%	44.0Vdc 40.8Vdc 38.4Vdc
High DC Recovery Voltage	64Vdc
High DC Cut-off Voltage	66Vdc
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	8KW	
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	<p>The graph plots Battery Voltage (per cell) on the left y-axis and Charging Current (%) on the right y-axis against Time on the x-axis. The voltage curve (black) starts at 2.25Vdc, rises linearly to 2.43Vdc (2.35Vdc for AGM/Gel), remains constant during the Absorption phase, and then slightly drops to a floating voltage. The current curve (red) starts at 100% and decreases as the battery reaches full charge. The Bulk phase is labeled T0 and the Absorption phase is labeled T1, with a note 'minimum 10mins, maximum 8hrs' for T1. The Maintenance phase is labeled 'Floating'.</p>	
Solar Input		
MODEL	8KW	
Rated Power	8000W	
Max. PV Array Open Circuit Voltage	500Vdc	
PV Array MPPT Voltage Range	90Vdc~450Vdc	
Max. Input Current	18A x 2	
Start-up Voltage	80V +/- 5Vdc	
Power Limitation	<p>The graph plots PV Current on the y-axis against MPPT temperature on the x-axis. The current is constant at 18A from 0°C to 75°C. At 75°C, the current drops to 9A and remains constant up to 85°C. Above 85°C, the current is not shown, indicating a further reduction or shutdown.</p>	

Table 4 General Specifications

MODEL	8KW
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	147.4x 432.5 x 553.6
Net Weight, kg	18.4

Table 5 Parallel Specifications

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.