



Model Numbers

STR-ZT3000-24

STR-ZT5000-48

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	3KW	5KW
Input Voltage Waveform	Sinusoidal	
Nominal Input Voltage	230Vac	
Low Loss Voltage	110Vac±7V	
Low Loss Return Voltage	120Vac±7V	
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	46(56)±1Hz	
Low Loss Return Frequency	46.5(57)±1Hz	
High Loss Frequency	54(64)±1Hz	
High Loss Return Frequency	53(63)±1Hz	
Power Factor	>0.98	
Output Short Circuit Protection	Line mode: Circuit Breaker Battery mode: Electronic Circuits	
Efficiency (Line Mode)	93% (Peak Efficiency)	
Transfer Time	Line mode←→Battery mode 0ms Inverter←→Bypass 4ms	

Table 2 Battery Mode Specifications

INVERTER MODEL	3KW	5KW
Rated Output Power	3KVA/3KW	5KVA/5KW
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@105%~150% load	
Surge Capacity	2* rated power for 5 seconds	
Nominal DC Input Voltage	24Vdc	48Vdc
Operating Range	20Vdc -34Vdc	40Vdc -66Vdc
Cold Start Voltage	23Vdc	46Vdc
Low DC Warning Voltage @ load < 50% @ load ≥ 50%	22.5Vdc 22.0Vdc	45.0Vdc 44.0Vdc
Low DC Warning Return Voltage @ load < 50% @ load ≥ 50%	23.5Vdc 23.0Vdc	47.0Vdc 46.0Vdc
Low DC Cut-off Voltage @ load < 50% @ load ≥ 50%	21.5Vdc 21.0Vdc	43.0Vdc 42.0Vdc
High DC Recovery Voltage	32Vdc	64Vdc
High DC Cut-off Voltage	34Vdc	66Vdc
No Load Power Consumption	<75W	<75W

Table 3 Charge Mode Specifications

Utility Charging Mode			
INVERTER MODEL	3KW	5KW	
Charging Current @ Nominal Input Voltage	Default: 30A, max: 60A		
Bulk Charging Voltage	Flooded Battery	29.2Vdc	58.4Vdc
	AGM / Gel Battery	28.2Vdc	56.4Vdc
Floating Charging Voltage	27Vdc	54Vdc	
Overcharge Protection	34Vdc	66Vdc	
Charging Algorithm	3-Step		
Charging Curve	<p>The graph illustrates the 3-step charging process. The left y-axis represents Battery Voltage per cell, with markers at 2.25Vdc and 2.43Vdc (2.35Vdc). The right y-axis represents Charging Current as a percentage of the maximum, with markers at 50% and 100%. The x-axis represents Time, divided into three phases: Bulk (Constant Current), Absorption (Constant Voltage), and Maintenance (Floating). The time interval T0 covers the Bulk phase, and T1 covers the Absorption phase. A note specifies T1 = 10 * T0, with a minimum of 10 minutes and a maximum of 8 hours.</p>		

Solar Charging Mode (MPPT type)		
INVERTER MODEL	3KW	5KW
Rated Power	1500W	4000W
Maximum charging current	60A	80A
Efficiency	98.0% max.	
Max. PV Array Open Circuit Voltage	145Vdc	
PV Array MPPT Voltage Range	30~115Vdc	60~115Vdc
Battery Voltage Accuracy	+/-0.3%	
PV Voltage Accuracy	+/-2V	
Charging Algorithm	3-Step	
Joint Utility and Solar Charging		
Max Charging Current	120A	140A

Default Charging Current	60A
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Table 4 ECO/Bypass Mode Specifications

Bypass Mode		
INVERTER MODEL	3KW	5KW
Input Voltage Waveform	Sinusoidal	
Low Loss Voltage	176Vac±7V	
Low Loss Return Voltage	186Vac±7V	
High Loss Voltage	280Vac±7V	
High Loss Return Voltage	270Vac±7V	
Nominal Input Frequency	50Hz / 60Hz (Auto detection)	
Low Loss Frequency	46(56)±1Hz	
Low Loss Return Frequency	46.5(57)±1Hz	
High Loss Frequency	54(64)±1Hz	
High Loss Return Frequency	53(63)±1Hz	

Table 5 General Specifications

INVERTER MODEL	3KW	5KW
SCC type	MPPT	
Parallel-able	YES	
Communication	RS232 and Bluetooth	
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	140 x 303 x 525	
Net Weight, kg	13.0	13.5