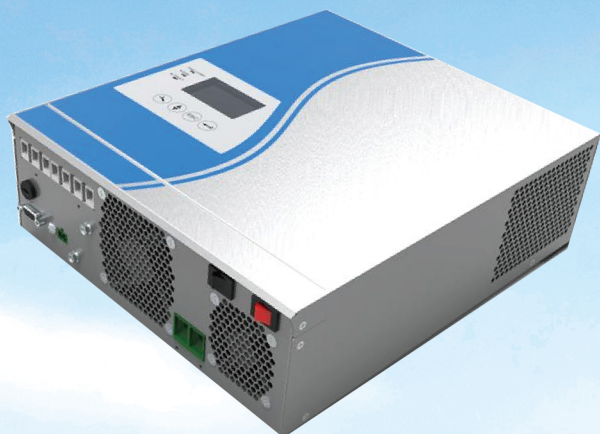


Spirit Series

Pure Sinewave Hybrid Inverter

1KVA to 3KVA



Overview

This is a pure sine wave stand-alone hybrid inverter system combining the function of inverter, solar charger and AC charger, and provides a long run-time uninterruptible power supply. Its comprehensive LCD display provides system status, and user-friendly panel eases parameters settings.



Key Feature

- High-frequency switching technology for compact size and light weight
- Pure sine wave output for wide range of applications and harsh environment
- Build-in solar charger controller with PWM/MPPT technology to optimize the power utilization
- High efficient DC-to-AC conversion minimizing energy loss
- Standby Charging Mode enables battery charging even when the unit is switched off
- Intelligent cooling fan control
- Input/output isolated design for the maximum operation safety
- LCD displays comprehensive operation status
- Configurable AC input voltage range and priority for AC input or PV input
- Supports Home Appliances / Office Equipment / Lighting Equipment/ Motor-based Equipment (such as Fan, Air-Conditioner, Washing Machines)
- Thorough protections: Input low voltage / Overload / Short circuit / Low battery alarm / Input over voltage / Over temperature
- Supports both rack and wall-mounting set-up for flexible installation

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SPECIFICATIONS

MODEL	1KVA~12/48 +SCC (PWM)	1.5KVA~12/24 +SCC (PWM or MPPT)	2KVA~24 +SCC (PWM or MPPT)	3KVA~24/48 +SCC (PWM or MPPT)
CAPACITY	0.8KW / 1KVA	1.2KW / 1.5KVA	1.6KW / 2.0KVA	2.4KW / 3KVA

Inverter Mode Specifications

INVERTER MODEL	1KVA-12	1.5KVA-12	1.5KVA-24	2KVA-24	3KVA-24	1KVA-48	3KVA-48
Rated Output Power	0.8KW/1KVA	1.2KW/1.5KVA	1.6KW/2KVA	2.4KW/3KVA	0.8KW/1KVA	2.4KW/3KVA	
OUTPUT							
Output Voltage Waveform	Pure Sine Wave						
Output Voltage Regulation	230Vac±5%						
Output Frequency	50Hz						
Peak Efficiency	93%						
Overload Protection	5s@>150% load; 10s@110%~150% load						
Surge Capacity	2*rated power for 5 seconds						
Nominal DC Input Voltage	12Vdc		24Vdc			48Vdc	
INPUT							
Cold Start Voltage	11.5Vdc		23.0Vdc			46Vdc	
High DC Recovery Voltage	32Vdc		32Vdc			62Vdc	
High DC Cut-off Voltage	33Vdc		33Vdc			64Vdc	

Specifications subject to change without prior notice.

Line Mode Specifications

INPUT	1KVA-12/48	1.5KVA-12/24	2KVA-24	3KVA-24/48
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	1KVA-12/48	1.5KVA-12/24	2KVA-24	3KVA-24/48
Output Short Circuit Protection	Fuse			
Efficiency (Line Mode)	>95% (Rated R load, battery full charged)			
Transfer Time	10ms typical (UPS) 20ms typical (Appliances)			

Specifications subject to change without prior notice.

Charge Mode Specifications (Utility Charging Mode)

INVERTER MODEL	1KVA-12	1.5KVA-12	1.5kVA-24	2KVA-24	3KVA-24	1KVA-48	3KVA-48
Charging Algorithm	3-Step						
AC Charging Current (Max)	30Amp (@Vi/p=230Vac)					15Amp (@Vi/p=230Vac)	
Bulk Charging Voltage							
Flooded Battery	14.6Vdc		29.2Vdc			58.4Vdc	
AGM / Gel Battery	14.1Vdc		28.2Vdc			56.4Vdc	
Floating Charging Voltage	13.7Vdc		27.4Vdc			54.8Vdc	
MPPT Solar Charging Mode							
Charging Current	N/A		40Amp			20Amp	
PV Array MPPT Voltage Range	N/A		30-75Vdc			60-120Vdc	
Max. PV Array Open Circuit Voltage	N/A		75Vdc			120Vdc	
Max Charging Current (AC charger plus solar charger)	N/A		65 Amp			35 Amp	
PWM Solar Charging Mode							
Charging Current			50Amp				
System DC Voltage	12Vdc		24Vdc			48Vdc	
Operating Voltage Range	15-18Vdc		30-32Vdc			60-64Vdc	
Max. PV Array Open Circuit Voltage	50Vdc		60Vdc			90Vdc	
Max Charging Current (AC charger plus solar charger)			75 Amp				

Specifications subject to change without prior notice.

General Specifications

INVERTER MODEL	1KVA-12/48	1.5KVA-12	1.5KVA-24	2KVA-24	3KVA-24/48
Safety Certification	CE				
Operating Temperature Range	-10°C to 50°C				
Storage temperature	-15°C ~ 60°C				
Dimension (D×W×H) mm	105×288×345				
Net Weight ,kg	6.2KG/6.0KG		6.6KG/6.4KG		
(MPPT/PWM model)					

Specifications subject to change without prior notice.

HEADQUARTERS

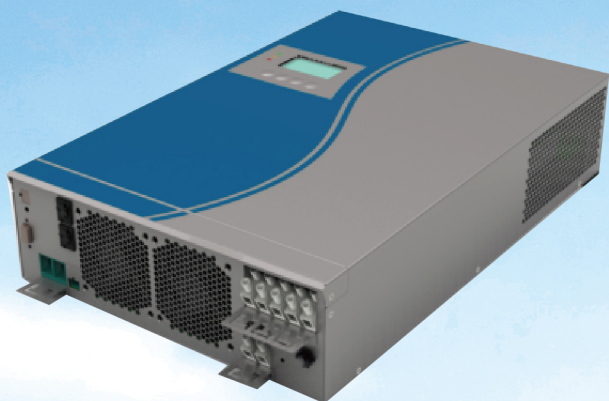
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Spirit Series

Pure Sinewave Hybrid Inverter

5KVA



Overview

This is a pure sine wave stand-alone inverter/charger system combining the function of inverter, solar charger and AC charger, and provides a long run-time uninterruptible power supply. Its comprehensive LCD display provides system status, and user-friendly panel eases parameters settings.



Key Feature

- High-frequency switching technology for compact size and light weight
- Pure sine wave output for wide range of applications and harsh environment
- Build-in solar charger controller with PWM/MPPT technology to optimize the power utilization
- High efficient DC-to-AC conversion minimizing energy loss
- Standby Charging Mode enables battery charging even when the unit is switched off
- Intelligent cooling fan control
- Input/output isolated design for the maximum operation safety
- LCD displays comprehensive operation status
- Configurable AC input voltage range and priority for AC input or PV input
- Supports Home Appliances / Office Equipment / Lighting Equipment/ Motor-based Equipment (such as Fan, Air-Conditioner, Washing Machines)
- Thorough protections: Input low voltage / Overload / Short circuit / Low battery alarm / Input over voltage / Over temperature
- Supports both rack and wall-mounting set-up for flexible installation

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SPECIFICATIONS

MODEL	Spirit 5KVA+SCC
CAPACITY	5000VA/4000W

Inverter Mode Specifications

MODEL	Spirit 5KVA+SCC
Rated Output Power	5000VA/4000W
OUTPUT	
Output Voltage Waveform	Pure Sine Wave
Output Voltage Regulation	230Vac±5%
Output Frequency	50Hz
Peak Efficiency	93%
Overload Protection	5s@>150% load; 10s@110%~150% load
Capable of starting electric motor	2.5HP
Nominal DC Input Voltage	48Vdc
INPUT	
Cold Start Voltage	46.0Vdc
Low DC Warning Voltage	42.0V
Low DC Warning Return Voltage	43.2 V
Low DC Cut-off Voltage	40.0V
High DC Cut-off Voltage	58.0V

Specifications subject to change without prior notice.

Line Mode Specifications

MODEL	Spirit 5KVA+SCC
INPUT	
Input Voltage Waveform	Sinusoidal (utility or generator)
Nominal Input Voltage	230ac
Low Loss Voltage	175Vac±7V (UPS) 125Vac±7V (Appliances)
Low Loss Return Voltage	185Vac±7V (UPS) 135Vac±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	
Output Short Circuit Protection	Circuit Breaker
Efficiency (Line Mode)	>95% (Rated R load, battery full charged)
Transfer Time	10ms typical (UPS) 20ms typical (Appliances)

Specifications subject to change without prior notice.

Charge Mode Specifications

Utility Charging Mode MODEL	Spirit 5KVA+SCC
Charging Algorithm	3-Step
AC Charging Current (Max)	35Amp (@Vi/p=230Vac)
Bulk Charging Voltage	
Flooded Battery	58.4Vdc
AGM / Gel Battery	56.4Vdc
Floating Charging Voltage	54Vdc
MPPT Solar Charging Mode MODEL	Spirit 5KVA+SCC
Charging Current	60Amp
PV Array MPPT Voltage Range	60Vdc to150Vdc
Max. PV Array Open Circuit Voltage	150V
Max Charging Current (AC charger plus solar charger)	95 Amp

Specifications subject to change without prior notice.

General Specifications

MODEL	Spirit 5KVA+SCC
Safety CerCommunication Port	RS232
Monitoring Function	WIFI (Optional)
Safety Certification	CE
Operating Temperature Range	-10°C ~ 50°C
Storage temperature	-15°C ~ 60°C
Dimension (D×W×H) mm	486×317×105
Net Weight ,kg (MPPT model)	11.6

Specifications subject to change without prior notice.

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