

7 SPECIFICATIONS

Table 1 Line Mode Specifications

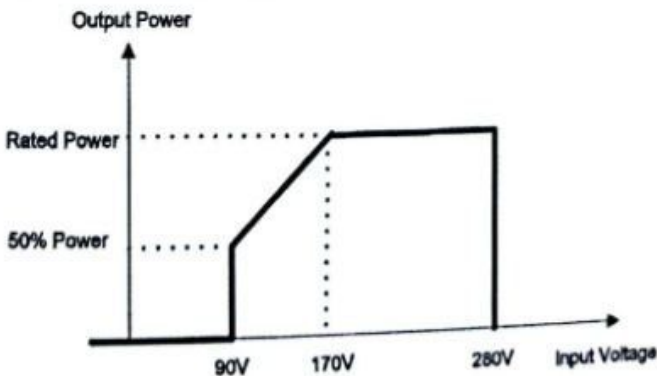
INVERTER MODEL	10.2KW
Input Voltage Waveform	Sinusoidal (utility or generator)
Nominal Input Voltage	230Vac
Low Loss Voltage	170Vac $\pm$ 7V (UPS); 90Vac $\pm$ 7V (Appliances)
Low Loss Return Voltage	180Vac $\pm$ 7V (UPS); 100Vac $\pm$ 7V (Appliances)
High Loss Voltage	280Vac $\pm$ 7V
High Loss Return Voltage	270Vac $\pm$ 7V
Max AC Input Voltage	300Vac
Nominal Input Frequency	50Hz / 60Hz (Auto detection)
Low Loss Frequency	40 $\pm$ 1Hz
Low Loss Return Frequency	42 $\pm$ 1Hz
High Loss Frequency	65 $\pm$ 1Hz
High Loss Return Frequency	63 $\pm$ 1Hz
Output Short Circuit Protection	Circuit Breaker
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 170V, the output power will be derated.	 The graph illustrates the output power derating characteristics of the inverter. The vertical axis represents Output Power, and the horizontal axis represents Input Voltage. The power is constant at 50% of the rated power for input voltages between 90V and 170V. At 170V, the power begins to rise linearly, reaching the full rated power at 280V. The power remains at the rated level until the input voltage reaches 280V, after which it drops to zero.

Table 2 Inverter Mode Specifications

INVERTER MODEL	10.2KW
Rated Output Power	10.2KW
Output Voltage Waveform	Pure Sine Wave
Output Voltage Regulation	230Vac $\pm$ 5%
Output Frequency	50Hz
Peak Efficiency	93%
Overload Protection	3s@ $\geq$ 150% load; 5s@101%~150% load
Surge Capacity	2* rated power for 5 seconds
Nominal DC Input Voltage	48Vdc
Cold Start Voltage	46.0Vdc
Low DC Warning Voltage @ load < 50% @ load $\geq$ 50%	44.0Vdc 42.0Vdc
Low DC Warning Return Voltage @ load < 50% @ load $\geq$ 50%	45.0Vdc 44.0Vdc
Low DC Cut-off Voltage @ load < 50% @ load $\geq$ 50%	41.0Vdc 40.0Vdc
High DC Recovery Voltage	62Vdc
High DC Cut-off Voltage	63Vdc
No Load Power Consumption	75W

Table 3 Two Load Output Power

INVERTER MODEL	10.2KW
Full Load	10200W
Maximum Main Load	10200W
Maximum Second Load(battery model)	3400W
Main Load Cut Off Voltage	52VDC
Main Load Return Voltage	54VDC

Table 4 Charge Mode Specifications

Utility Charging Mode	
INVERTER MODEL	10.2KW
Charging Algorithm	3-Step
AC Charging Current (Max)	140Amp
Bulk Charging	Flooded Battery
Voltage	AGM / Gel Battery
Floating Charging Voltage	54Vdc
Charging Curve	
MPPT Solar Charging Mode	
INVERTER MODEL	10.2KW
Max. PV Array Power	PV1 Channel:5400W PV2 Channel:5400W
I _{Max.PV}	PV1 Channel:18A PV2 Channel:18A
Nominal PV Voltage	360Vdc
PV Array MPPT Voltage Range	90Vdc~450Vdc
Max. PV Array Open Circuit Voltage	500Vdc
Max Charging Current (AC charger plus solar charger)	160Amp

Table 5 Grid-Tie Operation

INVERTER MODEL	10.2KW
Nominal Output Voltage	220/230/240VAC
Feed-in Grid Voltage Range	195~253VAC
Feed-in Grid Frequency Range	49~51±1Hz/59~61±1Hz
Nominal Output Current	44.3A
Power Factor Range	>0.99
Maximum Conversion Efficiency (DC/AC)	98%

Table 6 General Specifications

INVERTER MODEL	10.2KW
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	530*390*130mm
Net Weight, kg	14.5