

## 7 SPECIFICATIONS

Table 1 Line Mode Specifications

INVERTER MODEL	3.6KW	4.2KW	6.2KW
<b>Input Voltage Waveform</b>	Sinusoidal (utility or generator)		
<b>Nominal Input Voltage</b>	230Vac		
<b>Low Loss Voltage</b>	170Vac±7V (UPS); 90Vac±7V (Appliances)		
<b>Low Loss Return Voltage</b>	180Vac±7V (UPS); 100Vac±7V (Appliances)		
<b>High Loss Voltage</b>	280Vac±7V		
<b>High Loss Return Voltage</b>	270Vac±7V		
<b>Max AC Input Voltage</b>	300Vac		
<b>Nominal Input Frequency</b>	50Hz / 60Hz (Auto detection)		
<b>Low Loss Frequency</b>	40±1Hz		
<b>Low Loss Return Frequency</b>	42±1Hz		
<b>High Loss Frequency</b>	65±1Hz		
<b>High Loss Return Frequency</b>	63±1Hz		
<b>Output Short Circuit Protection</b>	Circuit Breaker		
<b>Efficiency (Line Mode)</b>	>95% ( Rated R load, battery full charged )		
<b>Transfer Time</b>	10ms typical (UPS); 20ms typical (Appliances)		
<p><b>Output power derating:</b> When AC input voltage drops to 170V, the output power will be derated.</p>	<p>The graph illustrates the output power derating characteristics. The vertical axis represents Output Power, with a horizontal dotted line for Rated Power and a lower dotted line for 50% Power. The horizontal axis represents Input Voltage, with markers at 90V, 170V, and 280V. The power remains constant up to 90V, then increases linearly to reach the Rated Power level at 170V. It remains constant at the Rated Power level until 280V, after which it drops to zero.</p>		

Table 2 Inverter Mode Specifications

<b>INVERTER MODEL</b>	<b>3.6KW</b>	<b>4.2KW</b>	<b>6.2KW</b>
<b>Rated Output Power</b>	3.6KW	4.2KW	6.2KW
<b>Output Voltage Waveform</b>	Pure Sine Wave		
<b>Output Voltage Regulation</b>	230Vac±5%		
<b>Output Frequency</b>	50Hz		
<b>Peak Efficiency</b>	93%		
<b>Overload Protection</b>	3s@≥150% load; 5s@101%~150% load		
<b>Surge Capacity</b>	2* rated power for 5 seconds		
<b>Nominal DC Input Voltage</b>	24Vdc		48Vdc
<b>Cold Start Voltage</b>	23.0Vdc		46.0Vdc
<b>Low DC Warning Voltage</b> @ load < 50% @ load ≥ 50%	22.0Vdc 21.0Vdc		44.0Vdc 42.0Vdc
<b>Low DC Warning Return Voltage</b> @ load < 50% @ load ≥ 50%	22.5Vdc 22.0Vdc		45.0Vdc 44.0Vdc
<b>Low DC Cut-off Voltage</b> @ load < 50% @ load ≥ 50%	20.5Vdc 20.0Vdc		41.0Vdc 40.0Vdc
<b>High DC Recovery Voltage</b>	32Vdc		62Vdc
<b>High DC Cut-off Voltage</b>	33Vdc		63Vdc
<b>No Load Power Consumption</b>	30W	35W	50W

Table 3 Two Load Output Power

<b>INVERTER MODEL</b>	<b>3.6KW</b>	<b>4.2KW</b>	<b>6.2KW</b>
<b>Full Load</b>	3600W	4200W	6200W
<b>Maximum Main Load</b>	3600W	4200W	6200W
<b>Maximum Second Load(battery model)</b>	1200W	1400W	2066W
<b>Main Load Cut Off Voltage</b>	26VDC		52VDC
<b>Main Load Return Voltage</b>	27VDC		54VDC

Table 4 Charge Mode Specifications

Utility Charging Mode			
INVERTER MODEL	3.6KW	4.2KW	6.2KW
Charging Algorithm	3-Step		
AC Charging Current (Max)	100Amp (@V <sub>I/P</sub> =230Vac)		
Bulk Charging Voltage	Flooded Battery	29.2	58.4
	AGM / Gel Battery	28.2	56.4
Floating Charging Voltage	27Vdc	54Vdc	
Charging Curve			
MPPT Solar Charging Mode			
INVERTER MODEL	3.6KW	4.2KW	6.2KW
Max. PV Array Power	6200W		6500W
Nominal PV Voltage	240Vdc		360Vdc
PV Array MPPT Voltage Range	60Vdc~500Vdc		
Max. PV Array Open Circuit Voltage	500Vdc		
Max Charging Current (AC charger plus solar charger)	120Amp	120Amp	120Amp

Table 5 Grid-Tie Operation

INVERTER MODEL	3.6KW	4.2KW	6.2KW
Nominal Output Voltage	220/230/240 VAC		
Feed-in Grid Voltage Range	195 ~ 253VAC		
Feed-in Grid Frequency Range	49~51 ± 1Hz / 59~61 ± 1Hz		
Nominal Output Current	15.7A	18.2A	26.9A
Power Factor Range	> 0.99		
Maximum Conversion Efficiency (DC/AC)	97%		

Table 6 General Specifications

INVERTER MODEL	3.6KW	4.2KW	6.2KW
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	358×442×116		
Net Weight, kg	8.0	8.0	8.9