

7 SPECIFICATIONS

Table 1 Line Mode Specifications

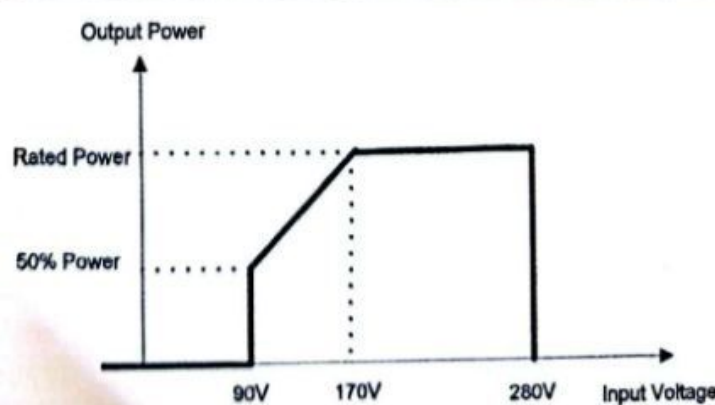
INVERTER MODEL	3.6KW	4.2KW	6.2KW
Input Voltage Waveform	Sinusoidal (utility or generator)		
Nominal Input Voltage	230Vac		
Low Loss Voltage	170Vac $\pm$ 7V (UPS); 90Vac $\pm$ 7V (Appliances)		
Low Loss Return Voltage	180Vac $\pm$ 7V (UPS); 100Vac $\pm$ 7V (Appliances)		
High Loss Voltage	280Vac $\pm$ 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, with specific levels for 50% Power and Rated Power marked. The horizontal axis represents Input Voltage, with key points at 90V, 170V, and 280V. The power remains constant at the Rated Power level from 170V up to 280V. Between 90V and 170V, the output power increases linearly, reaching the Rated Power at 170V. Below 90V, the output power is zero.		

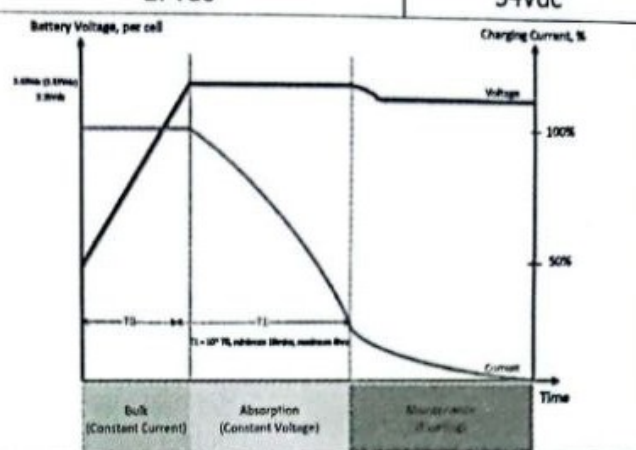
Table 2 Inverter Mode Specifications

INVERTER MODEL	3.6KW	4.2KW	6.2KW
Rated Output Power	3.6KW	4.2KW	6.2KW
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	24Vdc	48Vdc	
Cold Start Voltage	23.0Vdc	46.0Vdc	
Low DC Warning Voltage			
@ load < 50%	22.0Vdc	44.0Vdc	
@ load $\geq$ 50%	21.0Vdc	42.0Vdc	
Low DC Warning Return Voltage			
@ load < 50%	22.5Vdc	45.0Vdc	
@ load $\geq$ 50%	22.0Vdc	44.0Vdc	
Low DC Cut-off Voltage			
@ load < 50%	20.5Vdc	41.0Vdc	
@ load $\geq$ 50%	20.0Vdc	40.0Vdc	
High DC Recovery Voltage	32Vdc	62Vdc	
High DC Cut-off Voltage	33Vdc	63Vdc	
No Load Power Consumption	30W	35W	50W

Table 3 Two Load Output Power

INVERTER MODEL	3.6KW	4.2KW	6.2KW
Full Load	3600W	4200W	6200W
Maximum Main Load	3600W	4200W	6200W
Maximum Second Load(battery model)	1200W	1400W	2066W
Main Load Cut Off Voltage	26VDC		52VDC
Main Load Return Voltage	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 (@ $V_{LP}=230V_{AC}$)		
Bulk Charging	29.2		
Flooded Battery	58.4		
Voltage	28.2		
AGM / Gel Battery	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		
Nominal PV Voltage	240Vdc		
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 $\pm$ 1Hz/59~61 $\pm$ 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	110X334X423		
Net Weight, kg	9	9.5	10