7 SPECIFICATIONS

Table 1 Line Mode Specifications

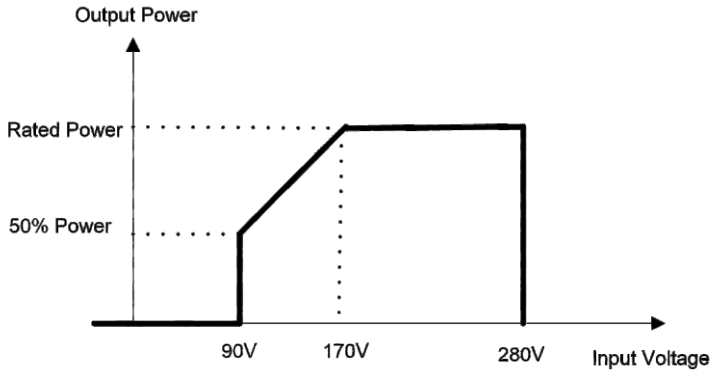
INVERTER MODEL	3.5KW	5.5KW
Input Voltage Waveform	Sinusoidal (utility or generator)	
Nominal Input Voltage	230Vac	
Low Loss Voltage	170Vac±7V (UPS); 90Vac±7V (Appliances)	
Low Loss Return Voltage	180Vac±7V (UPS); 100Vac±7V (Appliances)	
High Loss Voltage	280Vac±7V	
High Loss Return Voltage	270Vac±7V	
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 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.		

Table 2 Inverter Mode Specifications

INVERTER MODEL	3.5KW	5.5KW
Rated Output Power	3.5KW	5.5KW
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	24Vdc	48Vdc
Cold Start Voltage	23.0Vdc	46.0Vdc
Low DC Warning Voltage @ load < 50% @ load ≥ 50%	 22.0Vdc 21.0Vdc	 44.0Vdc 42.0Vdc
Low DC Warning Return Voltage @ load < 50% @ load ≥ 50%	 22.5Vdc 22.0Vdc	 45.0Vdc 44.0Vdc
Low DC Cut-off Voltage @ load < 50% @ load ≥ 50%	 20.5Vdc 20.0Vdc	 41.0Vdc 40.0Vdc
High DC Recovery Voltage	32Vdc	62Vdc
High DC Cut-off Voltage	33Vdc	63Vdc
No Load Power Consumption	<35W	

Table 3 Charge Mode Specifications

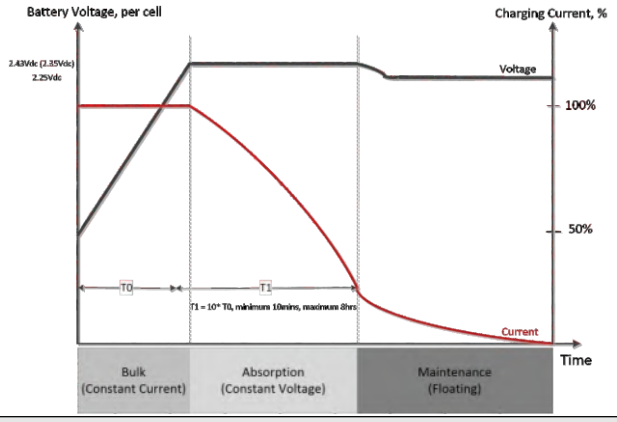
Utility Charging Mode			
INVERTER MODEL		**3.5KW**	**5.5KW**
Charging Algorithm		3-Step	
AC Charging Current (Max)		80Amp (@$V_{I/P}$=230Vac)	80 Amp (@$V_{I/P}$=230Vac)
Bulk Charging Voltage	**Flooded Battery**	29.2	58.4
	AGM / Gel Battery	28.2	56.4
Floating Charging Voltage		27Vdc	54Vdc
Charging Curve			
MPPT Solar Charging Mode			
INVERTER MODEL		**3.5KW**	**5.5KW**
Max. PV Array Power		5000W	6000W
Nominal PV Voltage		240Vdc	
PV Array MPPT Voltage Range		120~450Vdc	
Max. PV Array Open Circuit Voltage		500Vdc	
Max Charging Current (AC charger plus solar charger)		100Amp	100 Amp

Table 4 General Specifications

INVERTER MODEL	**3.5KW**	**5.5KW**
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	440X302X138	
Net Weight, kg	10	10.2