USER MANUAL

ON/OFF GRID SOLAR INVERTER
3.6KW/4.2KW/6.2KW

RV-3.6KW-M/RV-4.2KW-M

RV-6.2KW-M

7 SPECIFICATIONS

Table 1 Line Mode Specifications

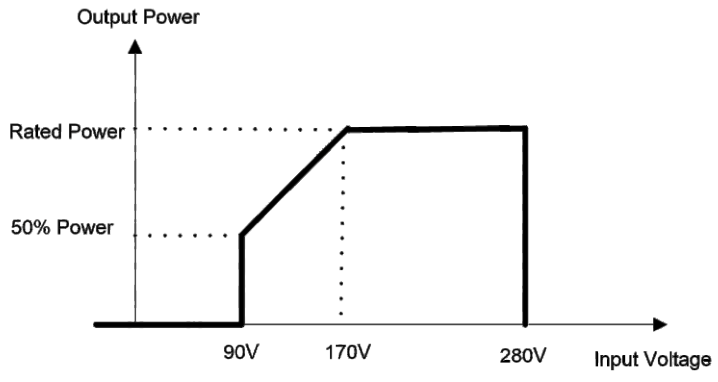
INVERTER MODEL	3.6KW	4.2KW	6.2KW
Input Voltage Waveform	Sinusoidal (utility or generator)		
Nominal Input Voltage	230Vac		
Low Loss Voltage	170Vac±7V (UPS); 90Vac±7V (Appliances)		
Low Loss Return Voltage	180Vac±7V (UPS); 100Vac±7V (Appliances)		
High Loss Voltage	280Vac±7V		
High Loss Return Voltage	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	3.6KW	4.2KW	6.2KW
Rated Output Power	3.6KW	4.2KW	6.2KW
Output Voltage Waveform	Pure Sine Wave		
Output Voltage Regulation	230Vac±5%		
Output Frequency	50Hz		
Peak Efficiency	93%		
Overload Protection	3s@≥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% @ 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	42W	62W

Table 3 Charge Mode Specifications

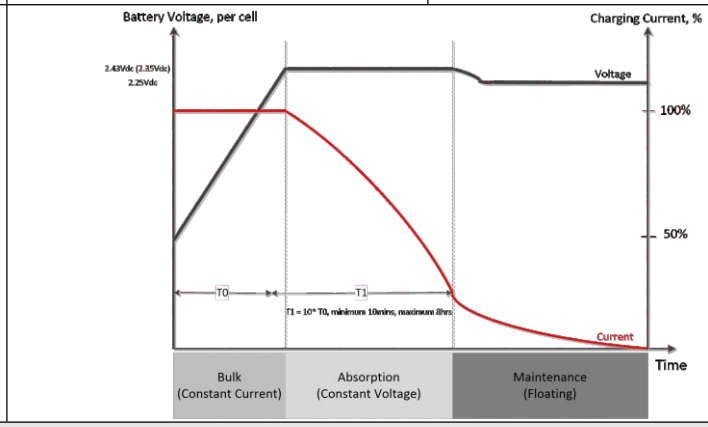
Utility Charging Mode				
INVERTER MODEL		**3.6KW**	**4.2KW**	**6.2KW**
Charging Algorithm		3-Step		
AC Charging Current (Max)		100Amp (@$V_{I/P}$=230Vac)		100Amp (@$V_{I/P}$=230Vac)
Bulk Charging Voltage	**Flooded Battery**	29.2		58.4
	AGM / Gel Battery	28.2		56.4
Floating Charging Voltage		27Vdc		54Vdc
Charging Curve				
MPPT Solar Charging Mode				
INVERTER MODEL		**3.6KW**	**4.2KW**	**6.2KW**
Max. PV Array Power		6200W	6200W	6500W
Nominal PV Voltage		240Vdc		360Vdc
PV Array MPPT Voltage Range		90Vdc~450Vdc		
Max. PV Array Open Circuit Voltage		500Vdc		
Max Charging Current (AC charger plus solar charger)		120Amp	140Amp	120Amp

Table 4 Grid-Tie Operation

INVERTER MODEL	**3.6KW**	**4.2KW**	**6.2KW**
Nominal Output Voltage	220/230/240 VAC		
Feed-in Grid Voltage Range	195 ~253VA C		
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 5 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	100 x 300 x 444		
Net Weight, kg	10	10.5	11