





RPS WATERSECURE™ SOLAR HYBRID INVERTER

RPS | Rural Power Systems 40250 County Road 27 Woodland, Ca 95776 Visit us online at RPSsolarpumps.com



		WS 3K	WS 6K	WS 12K
AC Input	Input Voltage Waveform	Pure Sine (utility or generator)		
	Nominal Input Voltage	230VAC		
	Low Line Disconnect	184Vac±4%(Normal) or 135Vac±4%(Wide) for 230Vac		
	Low Line Reconnect	194Vac±4%(Normal) or 145Vac±4%(Wide) for 230Vac		
	High Line Disconnect	263Vac±4%(Normal) or 263Vac±4%(Wide) for 230Vac		
	Max AC Input Voltage	230Vac for Max270Vac		
	Frequency	50Hz:41-54Hz, 60Hz:51-64Hz		
AC Charger	Nominal Charge Current	20A/35A/50A/70A (5 stages adjustable charging current) Bat.V≥31.0VDC for 24V battery. Bat.V≥62.0VDC for 48V		
	Over Charge Protection	Bat.V≥31.0VDC for 24V battery, Beep Pattern 0.5s every 1s	•	
Solar Charger	Rated Charge Current	60A		
	PV Input Voltage range	30VDC-55VDC for 24VDC	/DC 60-110VDC for 48V	
	Max.PV open circuit array			
	voltage	24V for 55VDC, 48V for 110VDC		
	Charger mode	MPPT		
	PV Low Voltage Reconnect	PV≥Bat.V=+3V		
	PV Low Voltage Disconnect	PV≤Bat.V		
	Efficiency	≥97%		
Charger	Nominal Charger Current	20A/35A/50A/70A (According to the inverter model), adjustable 5 stages charging current		
	Over Charge Protection	Bat.V≥15.5VDC/31VDC/62VDC,beeps 0.5s every 1s & fault after 60s		
Efficiency Battery Voltage	Efficiency (Battery Mode)	>87%		
	Efficiency (Line Mode)	>98%		
	Nominal DC Input Voltage	24VDC	48VDC	
	Low Battery Alarm	21VDC±0.6VDC for 24VDC	C±0.6VDC for 24VDC 42VDC±1.2VDC for 48VDC	
	Low DC input shut-down	20VDC±0.6VDC for 24VDC	DC for 24VDC 40VDC±1.2VDC for 48VDC	
			40VDC±1.2VDC for	
	High DC input Alarm & Fault	32VDC±0.6VDC for 24VDC	40VDC±1.2VDC fo 64VDC±1.2VDC fo	or 48VDC
ransfer Time		32VDC±0.6VDC for 24VDC		or 48VDC
Fransfer Time	High DC input Alarm & Fault	32VDC±0.6VDC for 24VDC	64VDC±1.2VDC fo	or 48VDC
System	High DC input Alarm & Fault AC to DC	100% <load<150%,< td=""><td>64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 6</td><td>or 48VDC or 48VDC 60s off the output,</td></load<150%,<>	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 6	or 48VDC or 48VDC 60s off the output,
System	High DC input Alarm & Fault AC to DC DC to AC Overload Protection	100% <load<150%,< td=""><td>64VDC±1.2VDC fo 20ms(max) 15ms(max)</td><td>or 48VDC or 48VDC 60s off the output,</td></load<150%,<>	64VDC±1.2VDC fo 20ms(max) 15ms(max)	or 48VDC or 48VDC 60s off the output,
ystem	High DC input Alarm & Fault AC to DC DC to AC	100% <load<150%,< td=""><td>64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 6</td><td>or 48VDC or 48VDC 60s off the output,</td></load<150%,<>	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 6	or 48VDC or 48VDC 60s off the output,
System	High DC input Alarm & Fault AC to DC DC to AC Overload Protection Output Short Circuit Protection	100% <load<150%,< td=""><td>64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after Current limit (Fault after 10s)</td><td>or 48VDC or 48VDC 60s off the output,</td></load<150%,<>	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after Current limit (Fault after 10s)	or 48VDC or 48VDC 60s off the output,
System	High DC input Alarm & Fault AC to DC DC to AC Overload Protection Output Short Circuit Protection Surge Rating (10s)	100% <load<150%,< td=""><td>64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after Current limit (Fault after 10s) 1:2(VA)</td><td>or 48VDC or 48VDC 60s off the output,</td></load<150%,<>	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after Current limit (Fault after 10s) 1:2(VA)	or 48VDC or 48VDC 60s off the output,
System	High DC input Alarm & Fault AC to DC DC to AC Overload Protection Output Short Circuit Protection Surge Rating (10s) Power Saver Mode	100% <load<150%, load>15</load<150%, 	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after Current limit (Fault after 10s) 1:2(VA) Load≤25W Enabled by default	or 48VDC or 48VDC 60s off the output, ter 20s
ystem	High DC input Alarm & Fault AC to DC DC to AC Overload Protection Output Short Circuit Protection Surge Rating (10s) Power Saver Mode Protections	100% <load<150%, load>15</load<150%, 	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after 10% Current limit (Fault after 10s) 1:2(VA) Load≤25W Enabled by default eattery, over charging, overload, over the	or 48VDC or 48VDC 60s off the output, ter 20s
system Parameter	High DC input Alarm & Fault AC to DC DC to AC Overload Protection Output Short Circuit Protection Surge Rating (10s) Power Saver Mode Protections Indicators	100% <load<150%, load>15</load<150%, 	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after 10% Current limit (Fault after 10s) 1:2(VA) Load≤25W Enabled by default pattery, over charging, overload, over the LED+LCD Display	or 48VDC or 48VDC 60s off the output, ter 20s
ystem arameter General	High DC input Alarm & Fault AC to DC DC to AC Overload Protection Output Short Circuit Protection Surge Rating (10s) Power Saver Mode Protections	100% <load<150%, load>15</load<150%, 	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after 10% Current limit (Fault after 10s) 1:2(VA) Load≤25W Enabled by default eattery, over charging, overload, over the	or 48VDC or 48VDC 60s off the output, ter 20s
ystem arameter General	High DC input Alarm & Fault AC to DC DC to AC Overload Protection Output Short Circuit Protection Surge Rating (10s) Power Saver Mode Protections Indicators Operating Temperature Range	100% <load<150%, load>15</load<150%, 	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after 10s) 1:2(VA) Load≤25W Enabled by default pattery, over charging, overload, over the LED+LCD Display -13°C to 40°C	or 48VDC or 48VDC 60s off the output, ter 20s
System Parameter General	High DC input Alarm & Fault AC to DC DC to AC Overload Protection Output Short Circuit Protection Surge Rating (10s) Power Saver Mode Protections Indicators Operating Temperature Range Vs Storage	100% <load<150%, load>15</load<150%, 	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after 10s) 1:2(VA) Load≤25W Enabled by default beattery, over charging, overload, over the LED+LCD Display -13°C to 40°C -15°C~60°C	or 48VDC or 48VDC 60s off the output, ter 20s
System Parameter General	High DC input Alarm & Fault AC to DC DC to AC Overload Protection Output Short Circuit Protection Surge Rating (10s) Power Saver Mode Protections Indicators Operating Temperature Range Vs Storage Operation humidity	100% <load<150%, load>15</load<150%, 	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after 10s) 1:2(VA) Load≤25W Enabled by default eattery, over charging, overload, over to LED+LCD Display -13°C to 40°C -15°C~60°C 5% to 95%(non-condensing)	or 48VDC or 48VDC 60s off the output, ter 20s
System Parameter General Specifications	High DC input Alarm & Fault AC to DC DC to AC Overload Protection Output Short Circuit Protection Surge Rating (10s) Power Saver Mode Protections Indicators Operating Temperature Range Vs Storage Operation humidity Audible Noise	100% <load<150%, load>15</load<150%, 	64VDC±1.2VDC for 20ms(max) 15ms(max) beeps 0.5s every 1s, and Fault after 60% beeps 0.5s every 1s, and Fault after 10s) 1:2(VA) Load≤25W Enabled by default eattery, over charging, overload, over the LED+LCD Display -13°C to 40°C -15°C~60°C 5% to 95%(non-condensing) 60dB max	or 48VDC or 48VDC 60s off the output, ter 20s

