Solar Off-Grid MPPT Inverter

Main Features

- ●Pure sine wave inverter
- ●Built-in MPPT solar charge controller
- ●Selectable input voltage range for home appliances and personal computers
- ● Selectable charging current based on applications
- ●Configurable AC/Solar input priority via LCD setting
- ●Compatible to mains voltage or generator power
- ●Auto restart while AC is recovering
- ●Overload and short circuit protection
- ●Smart battery charger design for optimized battery performance
- ●Cold start function

Model	1KVA12	1KVA24	1KVA48	2KVA12	2KVA24	2KVA48	3KVA24	3KVA48	4KVA48	5KVA48
RATED POWER	1000W	1000W	1000W	2000W	2000W	2000W	3000W	3000W	4000W	5000W
INPUT										
AC Voltage	120VAC / 230 VAC						230 VAC			
Selectable Voltage Range	90-280VAC									
Frequency Range	50 Hz / 60 Hz									
OUTPUT										
AC Voltage (Inverter. Mode)	120/230 VAC ± 3%						230VAC ± 3%			
Surge Power	2000W			4000W			6000W		8000W	10000W
Efficiency (Peak)	90%-92%			93%						
Transfer Time	<10ms									
Waveform	Pure sine wave									
BATTERY & AC CHARGER										
Battery Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC	24VDC	48VDC		
Floating Charge Voltage	13.8VDC	27.6VDC	54VDC	13.8VDC	27.6VDC	54VDC	27.6VDC	54VDC		
Overcharge Protection	16VDC	31VDC	62VDC	16VDC	31VDC	62VDC	31VDC	62VDC	60VDC	
SOLAR CHARGER & AC CHARGER										
Maximum PV Array Power	400W	800W	1500W	600W	800W	1500W	1500W	3000W	3000W	
MPPT Range @ Operating Voltage	20~80VDC	37~100VDC	72~160VDC	20~80VDC	37~100VDC	72~160VDC	37~100VDC	72~160VDC	72~ 160VDC	
PV Over-voltage Protection (Open Circuit Voltage)	90VDC	105VDC	160VDC	90VDC	105VDC	160VDC	105VDC	160VDC	160VDC	
Maximum Solar Charge Current	30A	30A	30A	30A	30A	30A	60A	60A	60A	
Maximum AC Charge Current							10A / 20A	10A / 15A	20A	
Maximum Charge Current	30A	30A	30A	30A	30A	30A	70A	70A	80A	
Standby Power Consumption	11W									
Maximum Efficiency	98%									
PHYSICAL										
Dimension, D x W x H (mm)	370 x230 x 100						455 x 300 x 110			
Net Weight (kgs)	4.7	4.7	4.7	4.8	4.8	4.8	8.4	8.4	8.5	8.5
OPERATING ENVIRONMENT										
Humidity (Non-condensing)	5% to 95% Relative Humidity									
Operating Temperature	0°C - 55°C									
Storage Temperature	-15°C - 60°C									

Basic System Architecture

The following illustration shows basic application for this inverter/charger. It also includes following devices to have a complete running system:

Generator or Utility.

PV modules

Consult with your system integrator for other possible system architectures depending on your requirements.

This inverter can power all kinds of appliances in home or office environment, including motor-type appliances such as tube light, fan, refrigerator and air conditioner.