Waterproof Single Phase MPPT Grid-tie Solar Inverter 1200W

Model: WVC-1200W

Features:

1. **Built-in high-precision automatic power point tracking (Maximum Power Point Tracking referred to as MPPT)**
   Powerful MPPT algorithm to optimize power collection from solar panels, accurately capture and lock the maximum output power point, so that the power generation capacity is greatly increased to more than 25%.
2. **Reverse power transmission**
   Efficient power reverse transmission technology, one of the patented technologies, when the inverter is connected to the grid output mode, the power is transmitted in the opposite direction, and the load in the circuit is automatically detected and used preferentially.
   The inexhaustible power is transmitted to the grid in reverse direction for transmission to other places, and the power transmission rate can reach 99.9%. Making output more efficient in photovoltaic power generation applications.
3. **Pure sine wave output**
   Directly generate a pure sine wave output using SPWM;
   1. Output waveform: using complementary PWM to push, pure sine wave;
   2. Generation method: enhanced high speed SPWM.
4. **Full digital control**
   The charging module adopts intelligent soft switching technology and built-in MCU;
   The inverter module adopts high-frequency switching power supply technology and 32-bit DSP full digital SPWM control technology, featuring strong anti-interference ability, fast calculation speed and high intelligence.
   High precision and output waveform quality.
5. **Grid-connected mode**
   In the grid-connected stack mode, the inverter can be stacked in parallel when connected to the grid. Off-grid stacking mode, when the inverter is used off-grid, any number of parallel stacks can be stacked in parallel.

The main control signal is sent out, and the inverter receives the main control signal and then outputs the synchronization.

6. **Electrical isolation**
   The output of the system is completely electrically isolated from the input, and the insulation performance of the entire power distribution system is good. The fully isolated boost circuit is safer and more reliable to use.
7. **Miniaturization**
   High frequency; miniature, high frequency processing, miniaturization, smaller and lighter.
8. **Protection function**
   Over temperature protection, under voltage alarm, under voltage protection, over voltage protection, short circuit protection, overload protection.
9. **Flexible installation**
   Multiple inverters can be stacked arbitrarily, which can form a single-phase parallel stacking system, or can easily form a three-phase system to provide three-phase alternating current.
10. **Simplify maintenance work (user self-maintenance)**
    After the installation of the power station is completed, there is almost no need to do maintenance work, and the dust on the photovoltaic panel can be cleaned after a long time.

Physical Description:

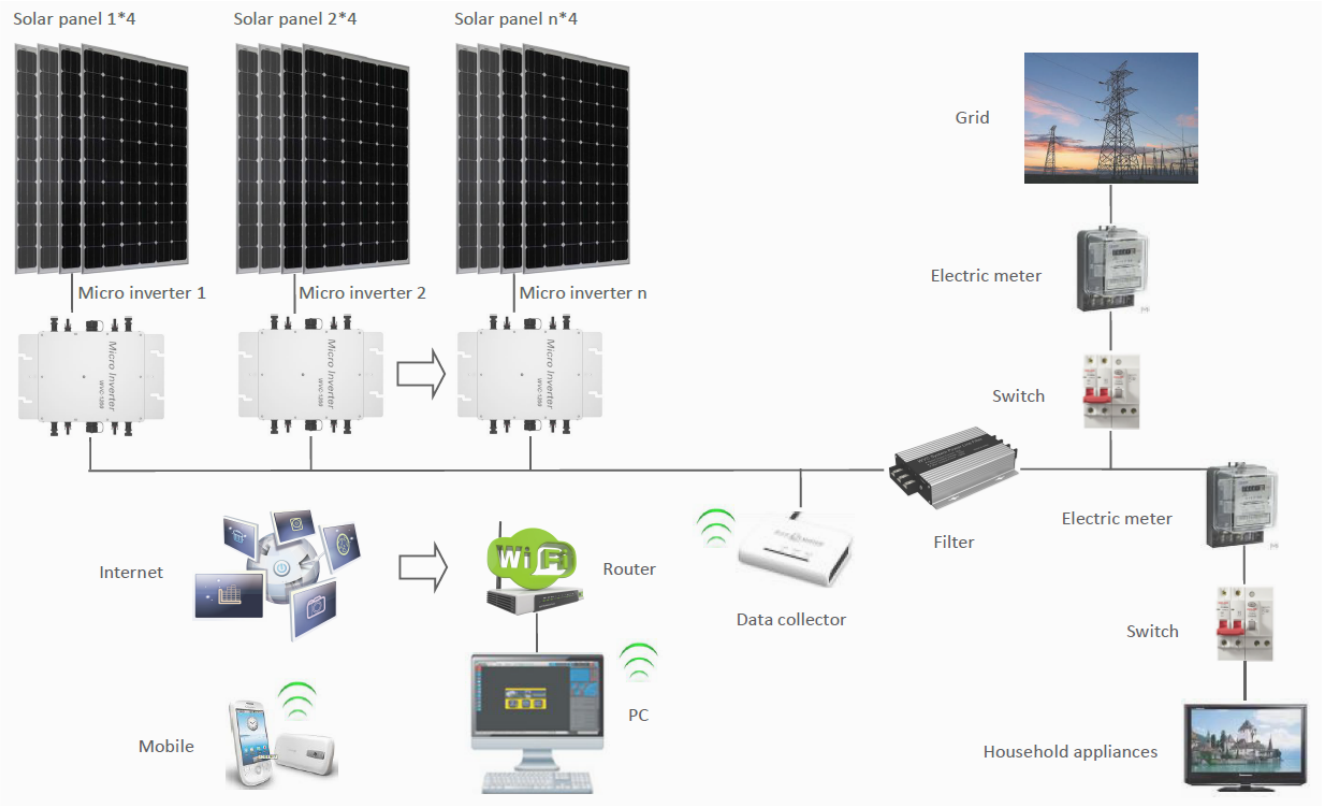
1. PV Panel Input 1
2. PV Panel Input 2
3. PV Panel Input 3
4. PV Panel Input
5. AC Input – Connect to the Previous
6. AC Output – Connect to the Next
7. 433/462MHz Wireless Line
8. LED Display

Technical Parameters:

Input parameters	**WVC-1200W**
Maximum input power	4 x 300Watt
Solar panels are recommended	Power 4 x 300W, open circuit voltage 36-50VDC
Solar panel open circuit voltage range	36-50VDC
Peak power tracking voltage	22-45V
Minimum/maximum starting voltage	22-50V
Maximum DC short circuit current	80A
Maximum input operating current	55A

Output parameters	@120VAC	@230VAC
Output peak power	1200Watt	1200Watt
Rated output power	1250Watt	1250Watt
Rated output current	11.5A	5.35A
Rated voltage range	90-160VAC	190-260VAC
Rated frequency range	47-52.5Hz /57-62.5Hz	47-52.5Hz /57-62.5Hz
Power Factor	>99%	>99%
Number of connected circuits per string	5 units (single phase)	10 units (single phase)
Output efficiency	@120VAC	@230VAC
Static MPPT efficiency	99.5%	99.5%
Maximum output efficiency	90%	90%
Loss of power at night	<1W	<1W
Total chopping distortion	<5%	<5%
Exterior		
Range of working temperature	-40°C to +60°C	
Size (length × width × height)	373.9mm x 284.4mm x 38mm	
Net weight	2.5kg	
Waterproof level	IP65	
Heat dissipation method	Self-cold	
Communication mode	Optional	
Power transmission mode	Optional	
Surveillance system	Optional	
Electromagnetic Compatibility	EN50081.part1 EN50082.part1	
Grid disturbance	EN61000-3-2 Safety EN62109	
Grid detection	DIN VDE 1026 UL1741	
Certificate	CEC, CE certified national patent technology	

Connection:



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