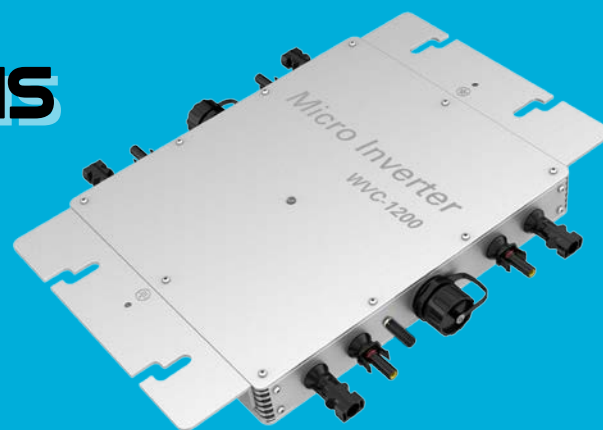


# Micro Inverter WVC-1200 Plus Description



## WVC-1200 Plus

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### WVC -1200 PLUS (433/462MHz Wireless)

#### Micro Inverter



**WVC-1200 Plus** Using IP65 waterproof streamline design, Can effectively prevent rainwater on the surface erosion, Built-in high-performance Maximum Power Point Tracking (MPPT) Function, Better able to track changes in the solar luminosity and control different output power, Effectively capture and collect sunlight. AC electric power transmission using the reverse transmission technology, Is one of our patented technology, The inverter output power can provide load priority use, Extra electricity to the grid, Efficient use of the inverter to the power emitted, Electricity transmission rate of up to 99%.

Communication using two modes, Between the inverter and Collector Using power line carrier communication signals, Collector with a PC or other devices to communicate Using RS232 serial port/ WIFI wireless communication. Intelligent monitoring systems, The inverter can collect real-time data, Inverter can be controlled startup / shutdown / power regulation.

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#### Features:

- High performance maximum power point tracking (MPPT)
- Reverse power transmission
- Intelligent monitoring management
- Input /output is fully isolated to protect the electrical safety
- Multiple parallel stacking
- Digital control system
- Simplify maintenance (user serviceable)
- Operation and maintenance costs low
- Flexible installation
- Use the wireless 433 / 462MHz communication mode

## WVC-1200 Plus

### WVC-1200 Plus Parameters

Input Data	KD-WVC-1200 Plus-120VAC/230VAC
Recommended input power	1200Watt
Recommend the use of PV modules	4*300W/V <sub>mp</sub> >34V/V <sub>oc</sub> <50V
Maximum input DC voltage	50V
Peak power tracking voltage	25-40V
Operating Voltage Range	17-50V
Min / Max start voltage	22-50V
Maximum DC short current	80A
Maximum Input Current	54.4A

Output Data	@120VAC	@230VAC
Peak power output	1200Watt	1200Watt
Rated output power	1150Watt	1150Watt
Rated output current	9.58A	5A
Rated voltage range	80-160VAC	180-260VAC
Rated frequency range	57-62.5Hz	47-52.5Hz
Power factor	>98%	>98%
Maximum units per branch circuit	3PCS (Single-phase)	5PCS (Single-phase)

Output Efficiency	@120VAC	@230VAC
Static MPPT efficiency	99.5%	99.5%
Maximum output efficiency	90%	90%
The average efficiency	88%	88%
Night time power consumption	<50mW Max	<70mW Max
THD	<5%	<5%

Exterior	
Ambient temperature	-40°C to +60°C
Operating temperature range (inverter inside)	-40°C to +82°C
Dimensions (WxHxD)	370mm×305mm×38mm
Weight	2.85kg
Waterproof Rating	IP65
Cooling	Self-cooling

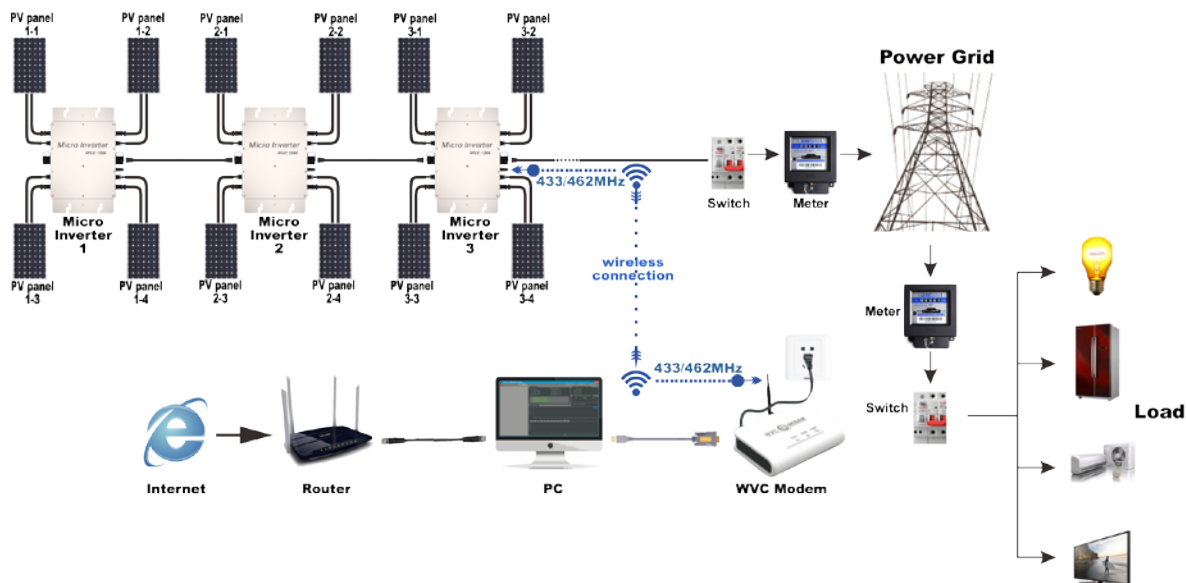
Feature	
Communication Mode	Power Line
Power transmission mode	Reverse transfer, load priority
Monitoring System	Lifetime free
Electromagnetic compatibility	EN50081. part1 EN50082. part1
Grid disturbance	EN61000-3-2 Safety EN62109
Grid detection	DIN VDE 1026 UL1741
Certificate	CEC, CE National patent technology

\* Note: Each data collector can monitor 100 inverters

# WVC-1200 Plus

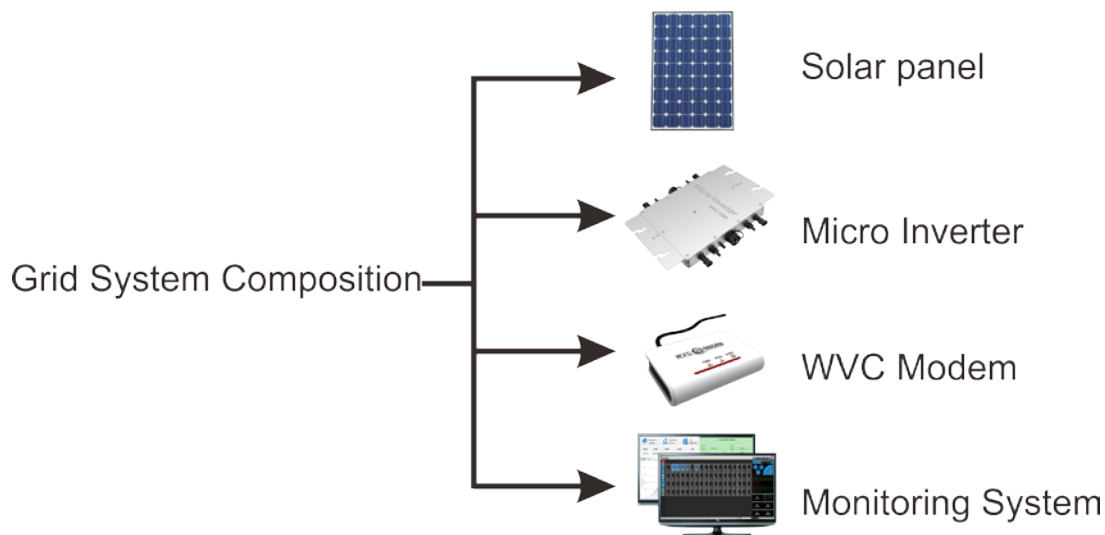
## PV micro-inverter system components

### System Block Diagram



## System Description

### Micro-grid inverter system components

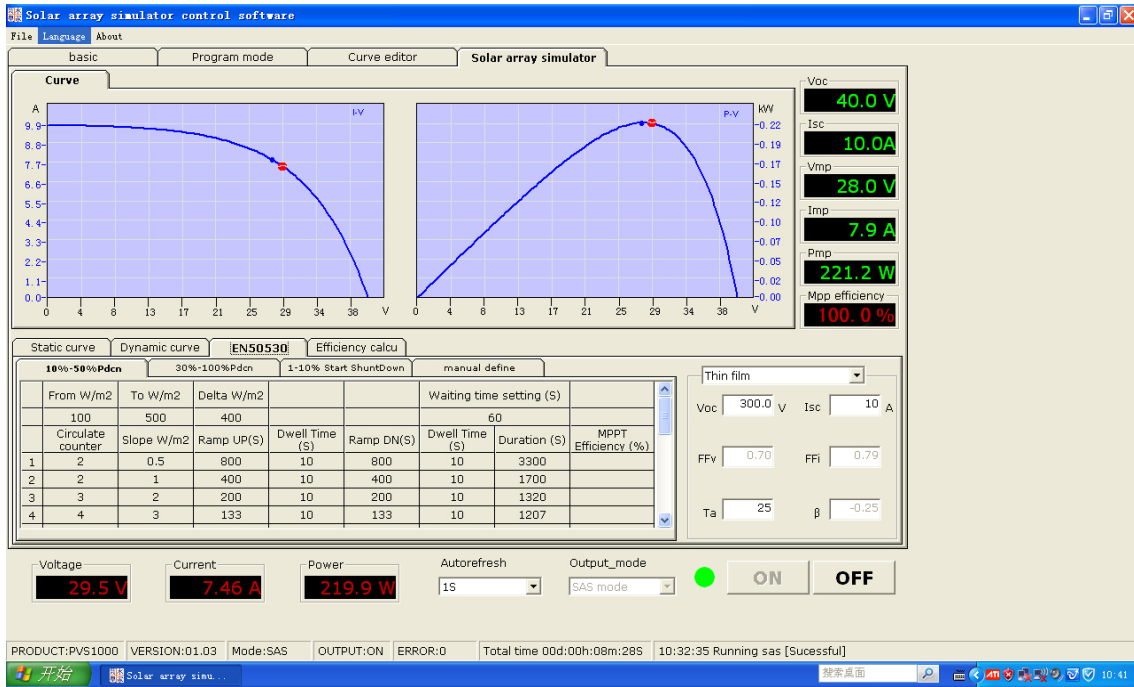


In summary, Micro-inverter system is simpler, more convenient installation.

# WVC-1200 Plus

## High performance maximum power point tracking (MPPT)

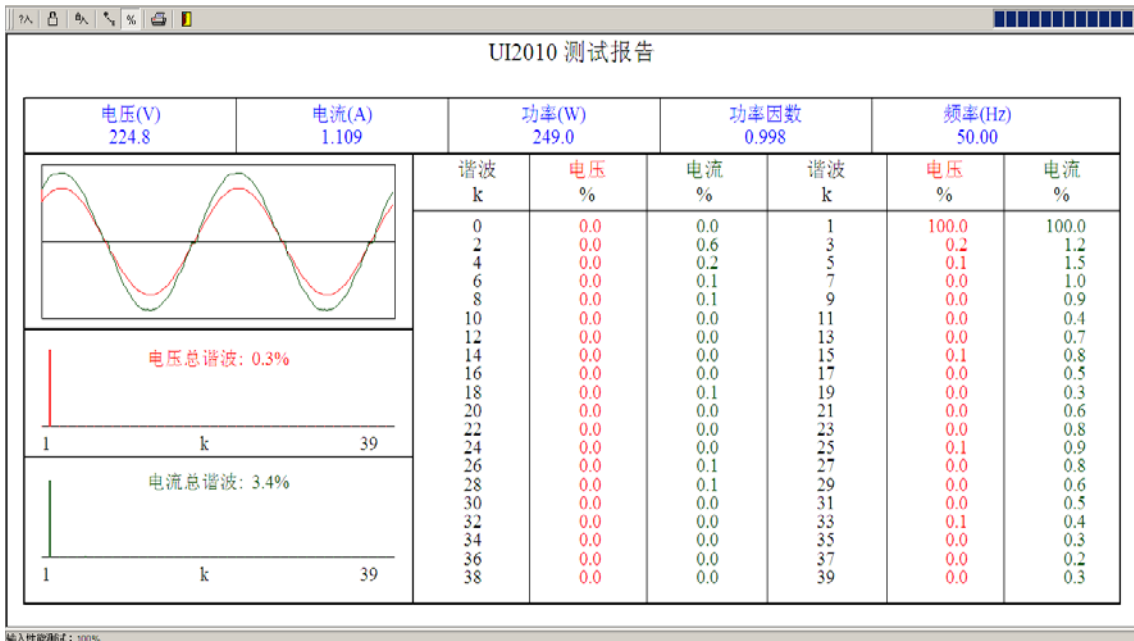
Powerful MPPT algorithm, Optimize the power from the solar panels to collect, Accurately capture and lock the maximum output power point, A substantial increase in output power greater than 25% or more.



## MPPT

## Power Output: (Reverse power transmission)

Reverse efficient power transmission technology, Patented technology, The inverter power transmission in the reverse direction, Automatic detection circuit load and using priority, Additional power transmitted to the grid, Power transmission rate up to 99.9%. Higher output efficiency in photovoltaic application system manipulation.

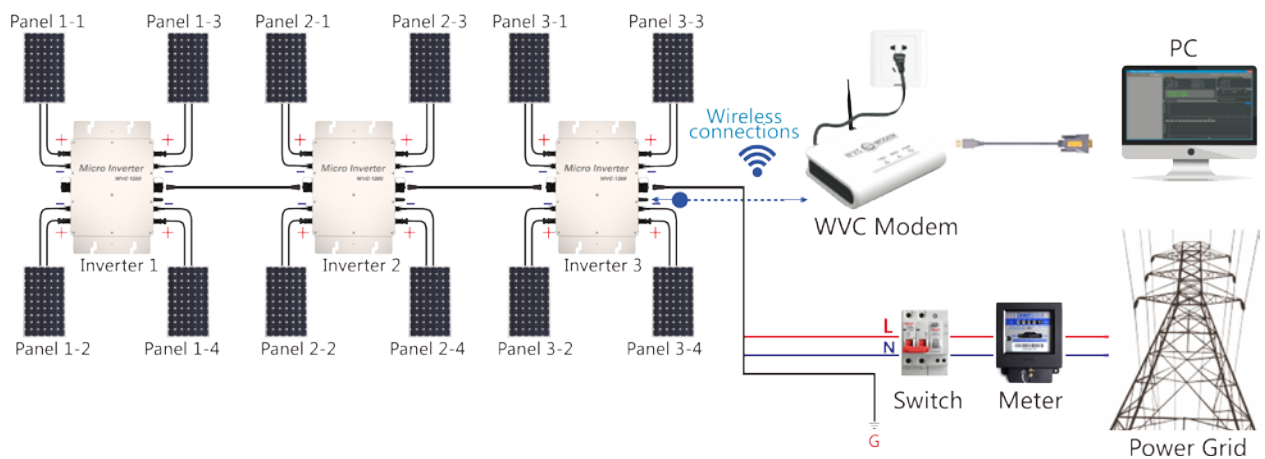


## THD

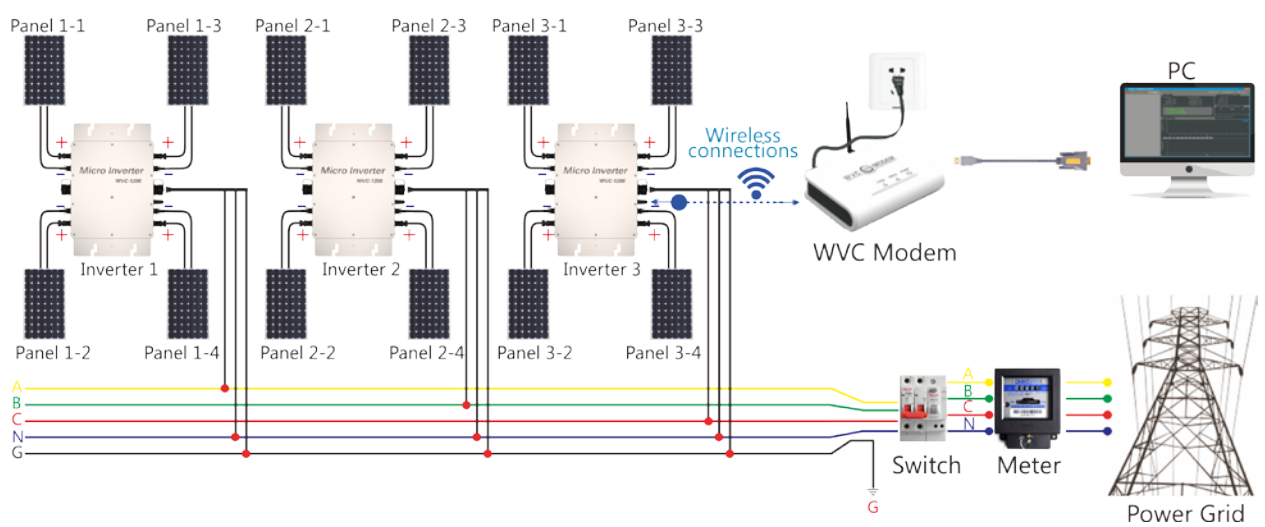
# WVC-1200 Plus

## Electrical schematics

### Single-phase electrical schematics



### Three-phase electrical schematics



## WVC-1200 Plus

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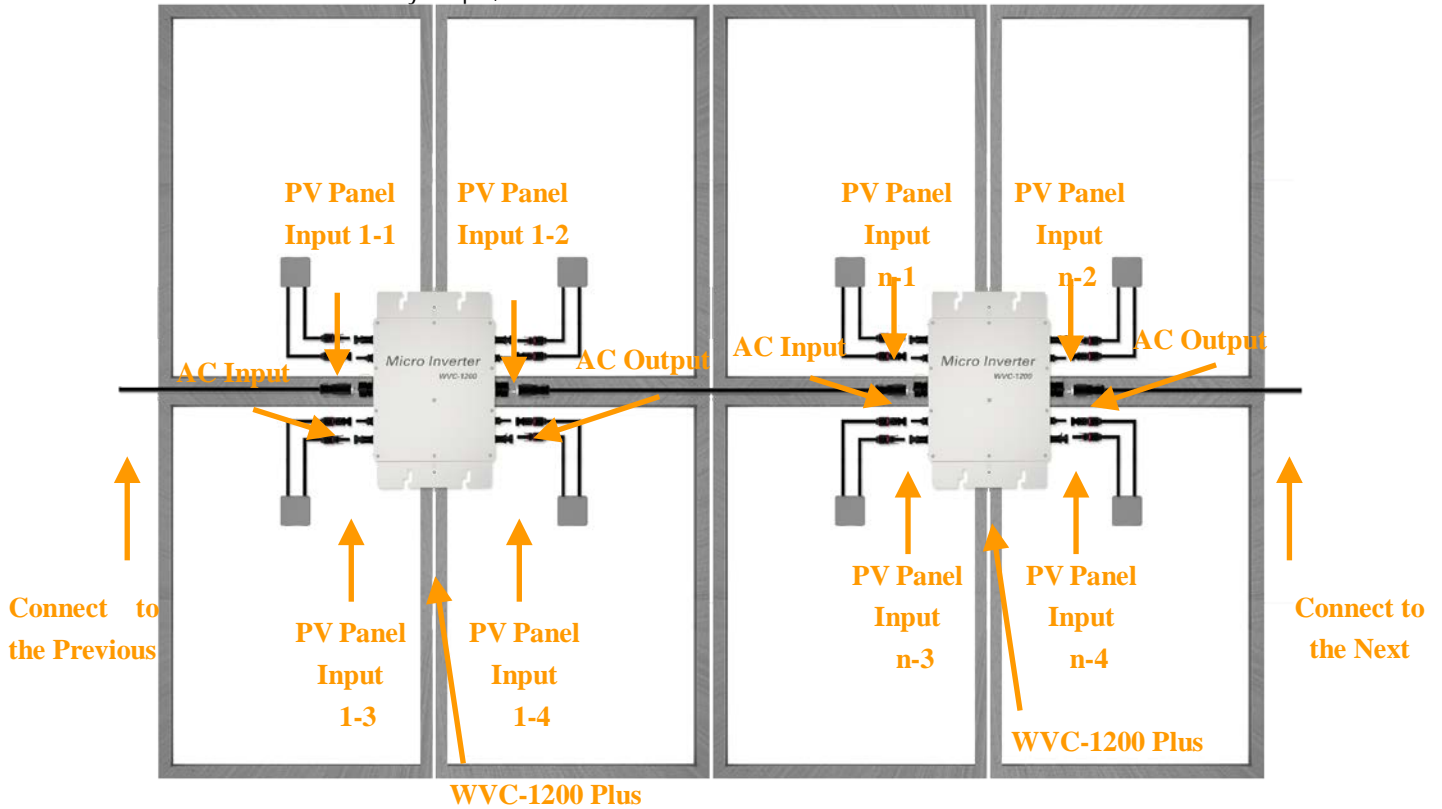


- ① PV Panel Input 1
- ② PV Panel Input 2
- ③ PV Panel Input 3
- ④ PV Panel Input 4
- ⑤ AC Input – Connect to the Previous
- ⑥ AC Output – Connect to the Next
- ⑦ 433/462MHz Wireless Line
- ⑧ LED Display

# WVC-1200 Plus

## Installation and connection

WVC-1200 Plus Series Solar Inverter very easy to install, No need for project professionals can also install. Whether installation or maintenance are very simple, No maintenance.



## Monitoring System

The Monitoring System KDM is KaiDeng Energy Technology Co., Ltd. have complete independent intellectual property developed intelligent monitoring systems, It is a product designed specifically for WVC

