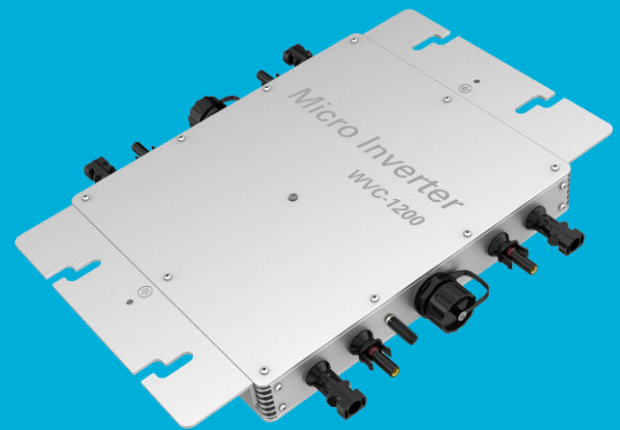


# Smart Inverter WVC-1200 (Wireless) Description



## WVC-1200 (Wireless)

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### WVC -1200 (Wireless) (433MHz Wireless)

#### Smart Inverter



**WVC-1200 (Wireless)** 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: The inverter communicates with the collector using the wireless communication 433MHz mode, and the collector communicates with the computer using the RS232 serial port mode. Intelligent monitoring system, can collect real-time inverter data, can control the inverter boot / shutdown / power adjustment function.

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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

## WVC-1200 (Wireless)

- Flexible installation
- Use the wireless 433MHz communication mode

### WVC-1200 (Wireless)

Parameters	KD-WVC-1200 (Wireless)-120VAC/230VAC
Maximum input power	1200Watt
Recommended using solar panels	Power4x300W,open circuit voltage 36-50VOC
Solar panel open circuit voltage range	36-50VOC
Peak power tracking voltage	22-50V
Min / Max start voltage	22-50V
Maximum DC short current	80A
Maximum Input Current	54.4A
Automatic shift AC voltage and output	Automatic shift local grid voltage

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	47-52.5Hz/57-62.5Hz	47-52.5Hz/57-62.5Hz
Power factor	>99%	>99%
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	91.2%	92.5%
Night time power consumption	<1W	<1W
THD	<5%	<5%

Exterior	
Operating temperature range	-40℃ to +60℃
Dimensions (WxHxD)	370mmx300mmx41.6mm
N.W.	2.83kg
Waterproof level	IP65
Cooling	Self-cooling
Communication Mode	Wireless 433MHz
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

Package weight	Single(packing)	Whole(2PCS)
Sepecification		
G.W.	4.03Kg	9.00Kg

# WVC-1200 (Wireless)

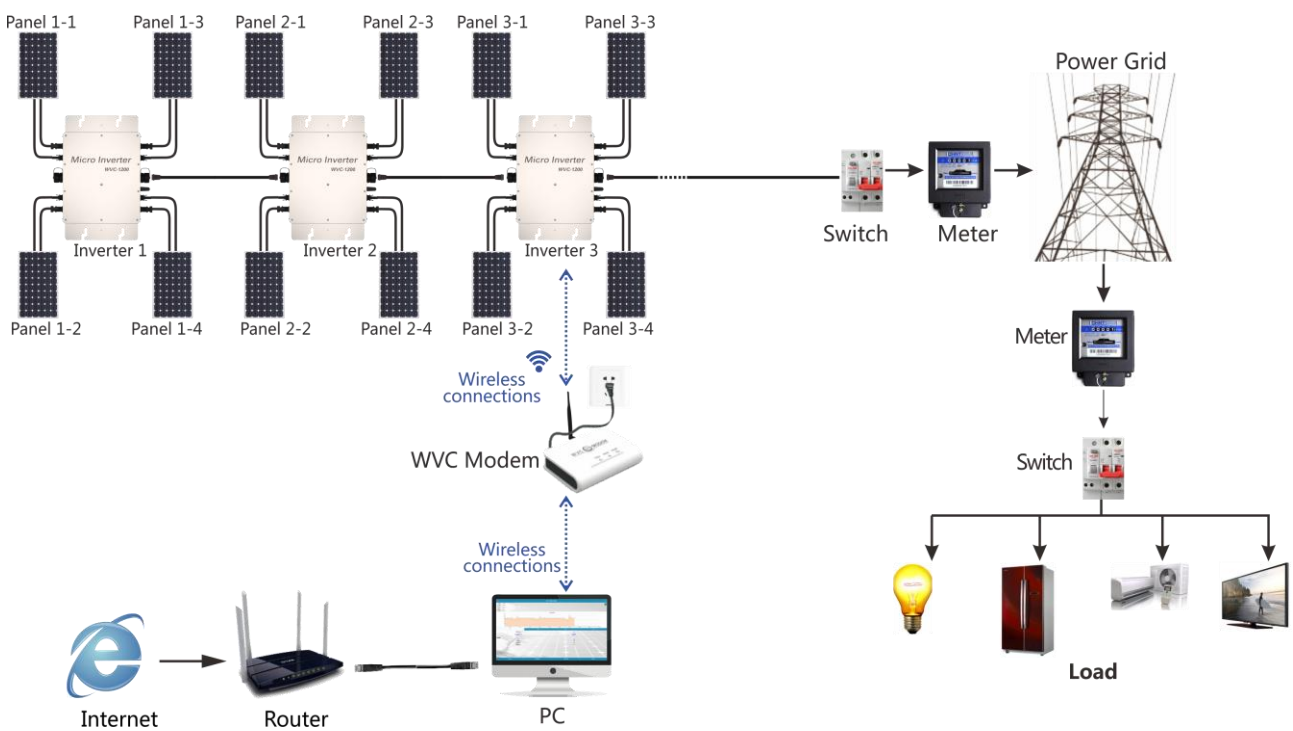
Dimensions	430x375x115mm	430x400x270mm
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Attn:each MODEM can control 46 PCS micro inverters on the condition of non-intelligent electric box

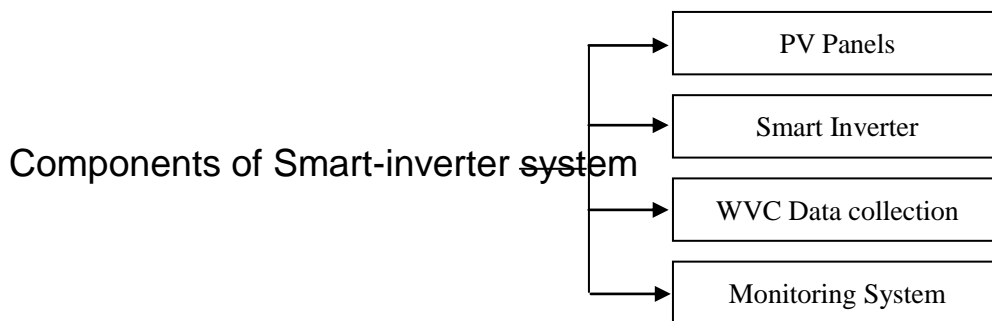
## PV Smart-inverter system components

### System Block Diagram



## System Description

### Smart-grid inverter system components

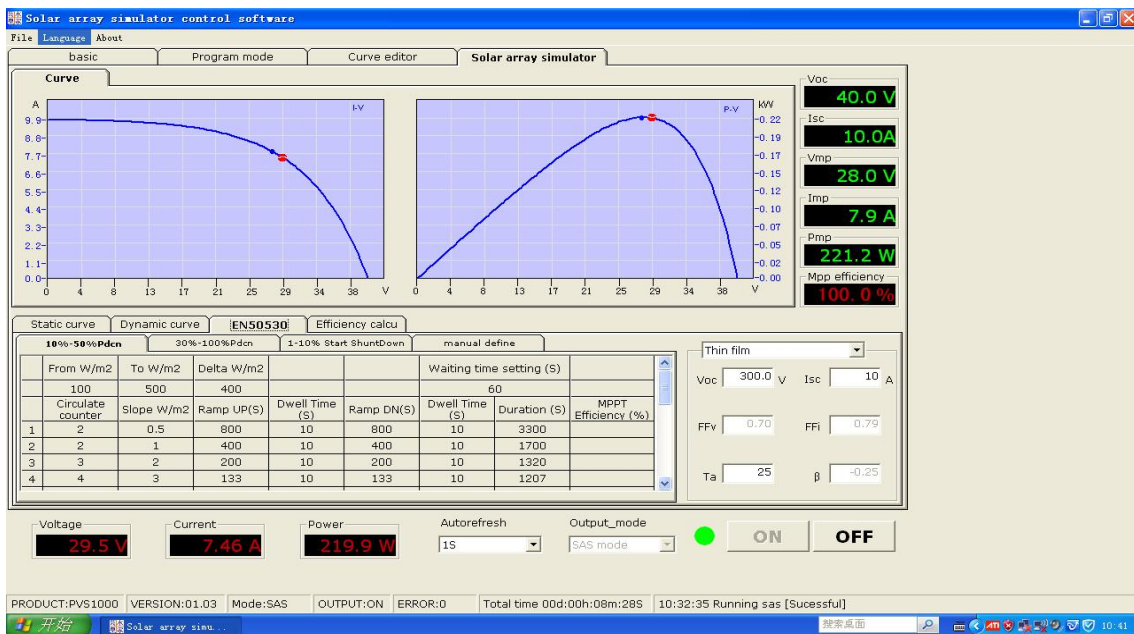


# WVC-1200 (Wireless)

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

## 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.

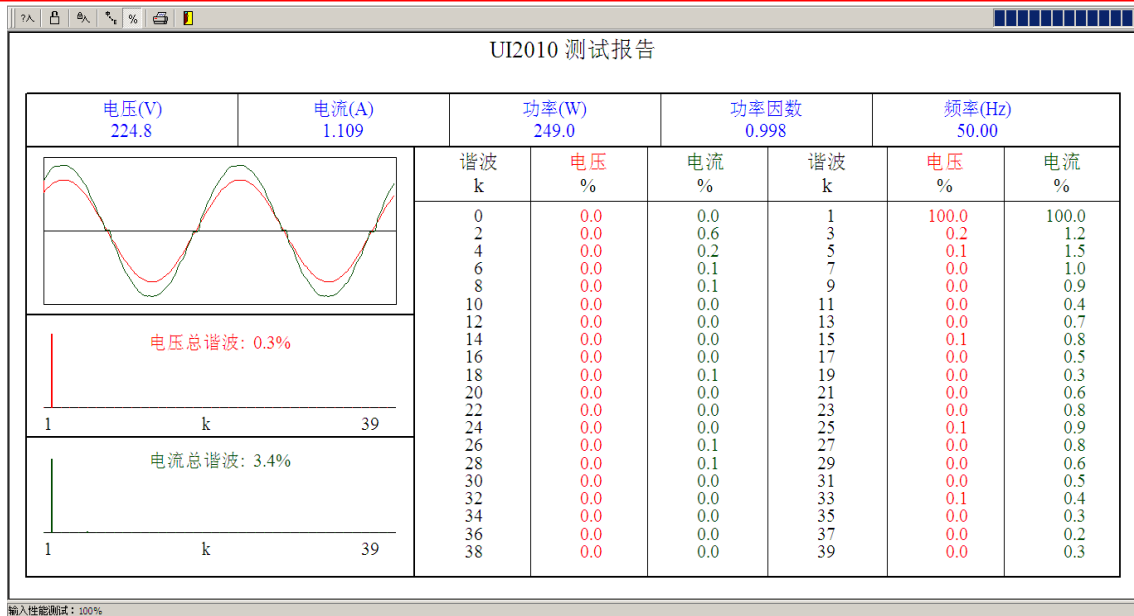


## MPPT

## 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.

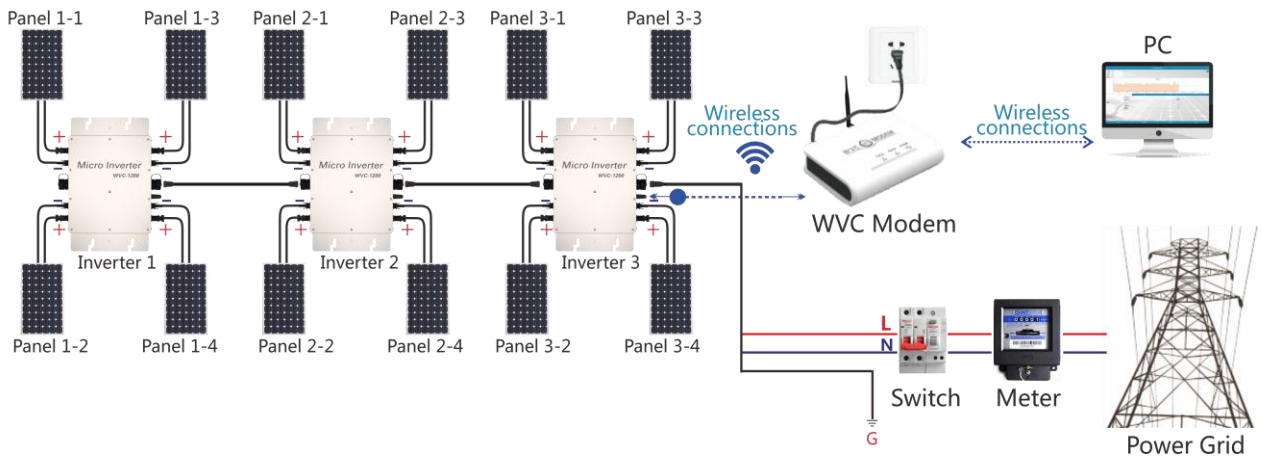
# WVC-1200 (Wireless)



THD

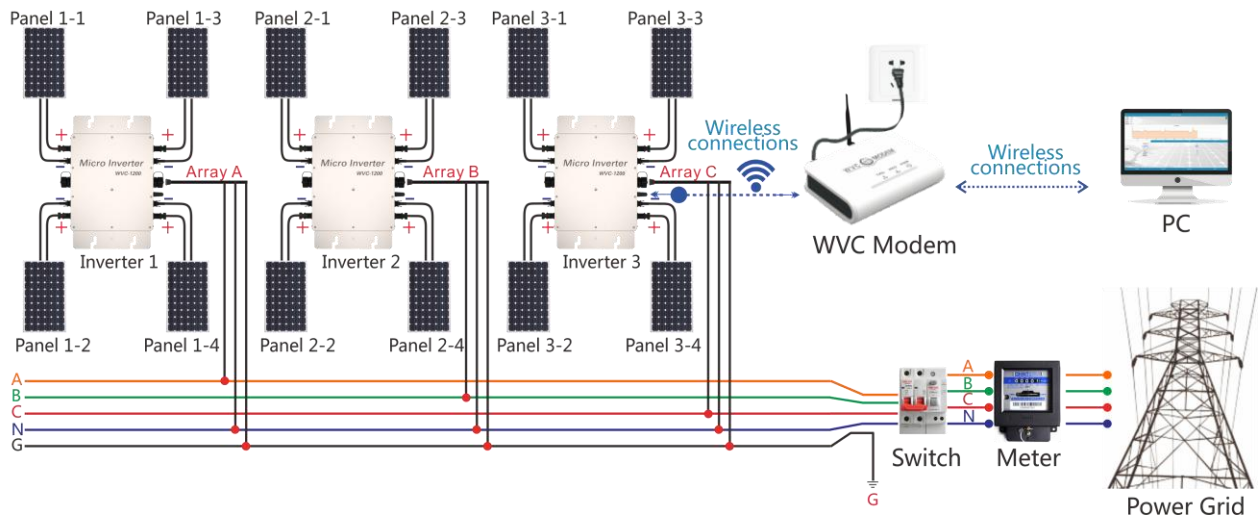
## Electrical schematics

### Single-phase electrical schematics



# WVC-1200 (Wireless)

## Three-phase electrical schematics



**WVC-1200 (Wireless)** 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,



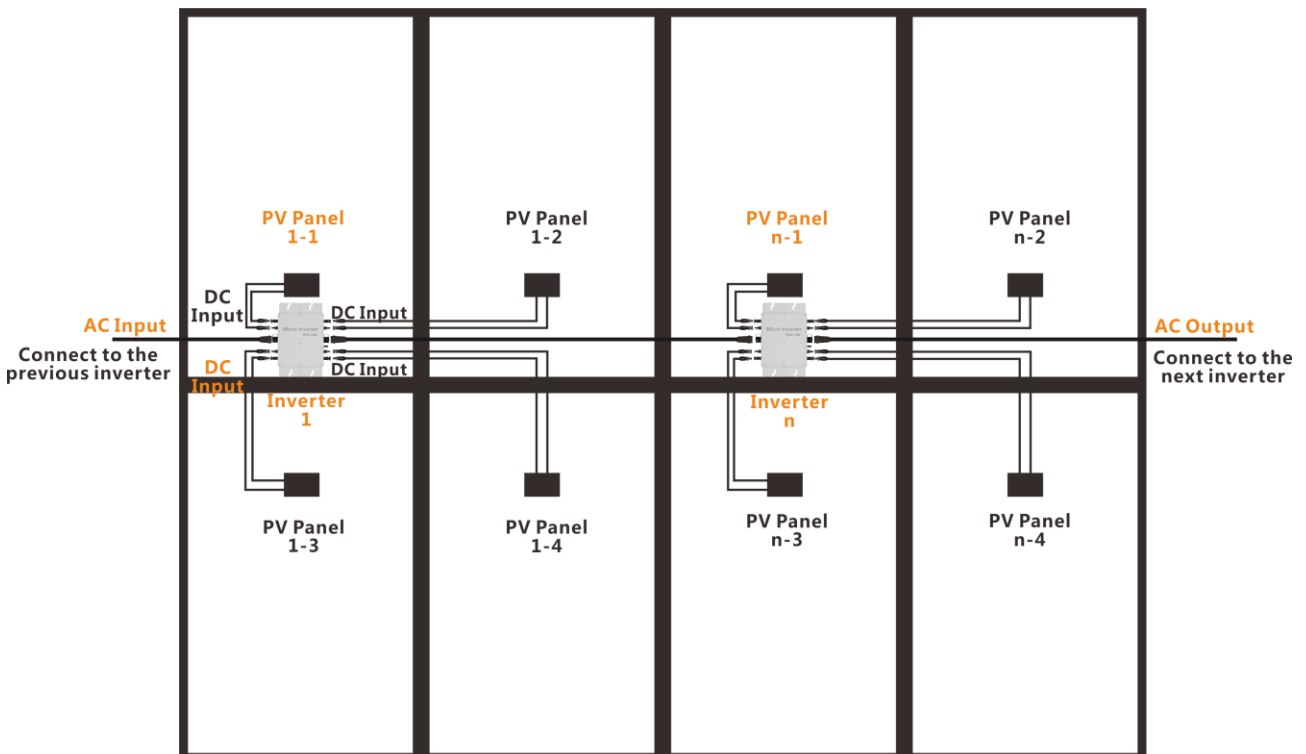
## WVC-1200 (Wireless)

Extra electricity to the grid, Efficient use of the inverter to the power emitted, Electricity transmission rate of up to 99%.

- 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

### Installation and connection

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





# WVC-1200 (Wireless)

## Monitoring System

The Monitoring System has complete independent intellectual property developed intelligent monitoring systems, It is a product designed specifically for WVC

今日电量	0.5KWh			
总发电量	575.5KWh			
有功功率	886.40W			
无功功率	225.80W	无功电量	54.5KWh	
电网电压	A相 219.11V	B相 0.00V	C相 0.00V	
输出电流	A相 4.31A	B相 0.00A	C相 0.00A	

即时功率(W)

电箱数量: 2 逆变器数量: 34

**单相电箱**

编码: 8888

CT: 1

逆变器数量: 18

A相电压	212.24V	交换频率	49.98Hz	
B相电压	0.0V	功率因数	0.976PF	
C相电压	0.0V	有功电量	314.3KWh	
A相电流	2.877A	无功电量	31.2KWh	
B相电流	0.0A	有功功率	582.00W	
C相电流	0.0A	无功功率	129.20W	