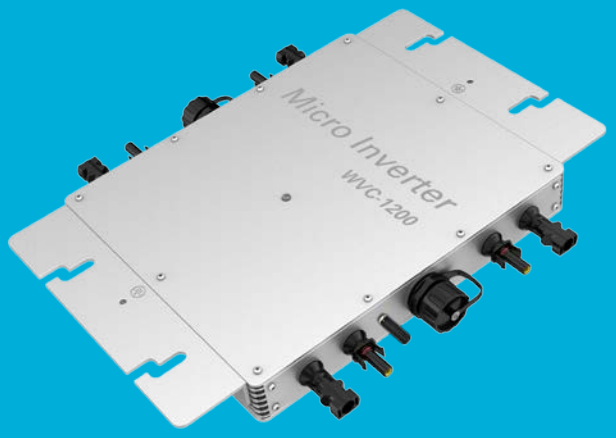
Green Energy
Smart Inverter **Expert**

Smart Inverter
WVC-1200 (Wireless)
Description



WVC-1200 (Wireless)

WVC -1200 (Wireless)（433/462MHz 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 433 / 462MHz 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.

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 (Wireless)

WVC-1200 (Wireless) Parameters

Input Data	KD-WVC-1200 (Wireless)-120VAC/230VAC
Maximum input power	1200Watt
Recommended using solar panels	Power4×300W, 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

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)	370mm×300mm×41.6mm
N.W.	2.83kg
Waterproof level	IP65
Cooling	Self-cooling
Communication Mode	Wireless 433/462MHz
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

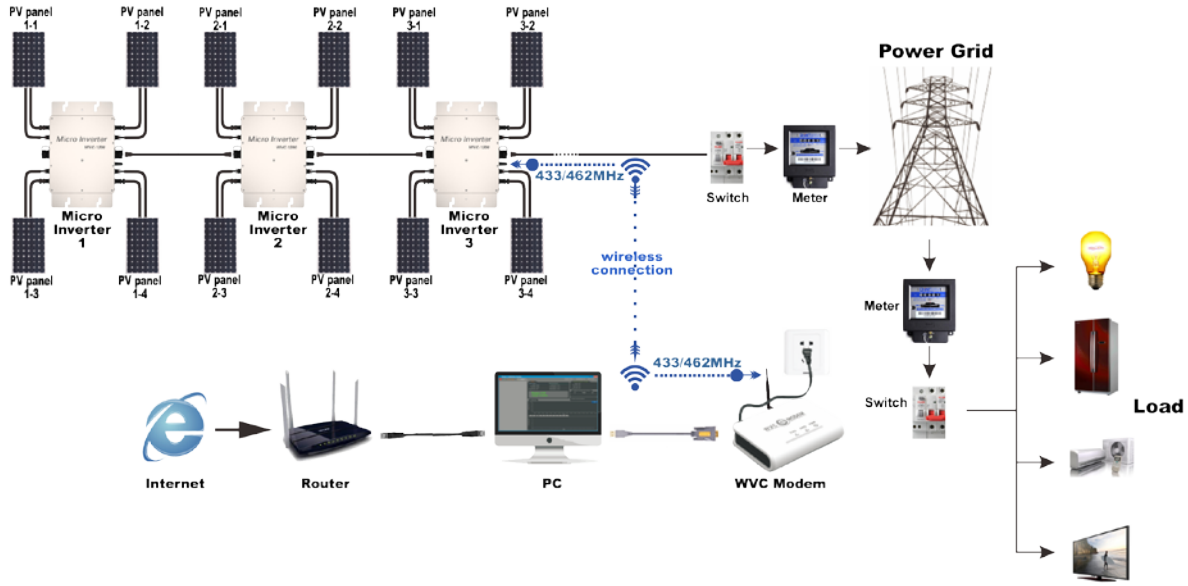
Package weight		
Sepcification	Single(packing)	Whole(5PCS)
G.W.	4.03Kg	9.00Kg
Dimensions	430×375×115mm	430×400×270

* Note: Each data collector can monitor 100 inverters

WVC-1200 (Wireless)

PV Smart-inverter system components

System Block Diagram



System Description

Smart-grid inverter system components

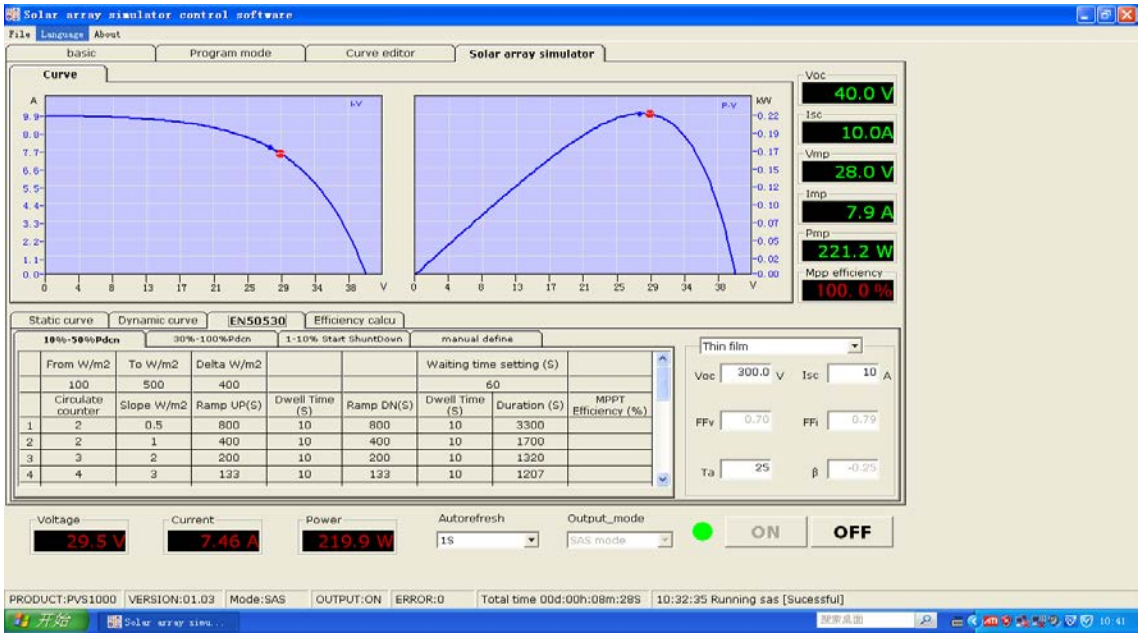
Components of Smart-inverter system

- PV Panels
- Smart Inverter
- WVC Data collection
- Monitoring System

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

High performance maximum power point tracking (MPPT)

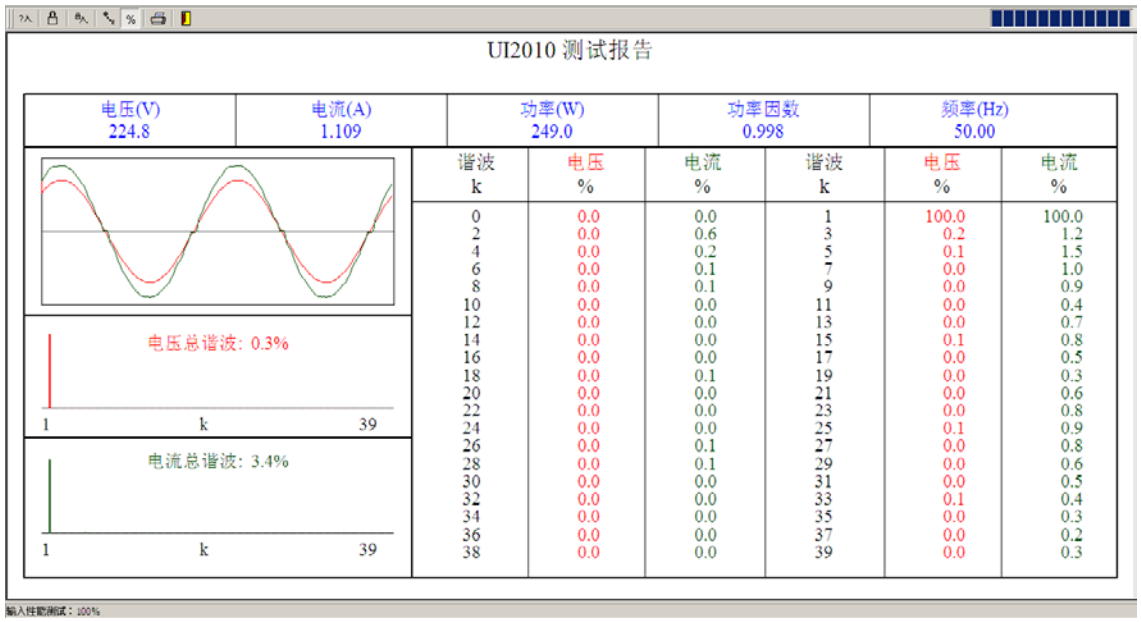
Powerful MPPT algorithm， Optimize the power from the solar panels to collect， Accurately capture and lock the maximum output power point， A substantial increase in output power greater than 25% or more.



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.



THD

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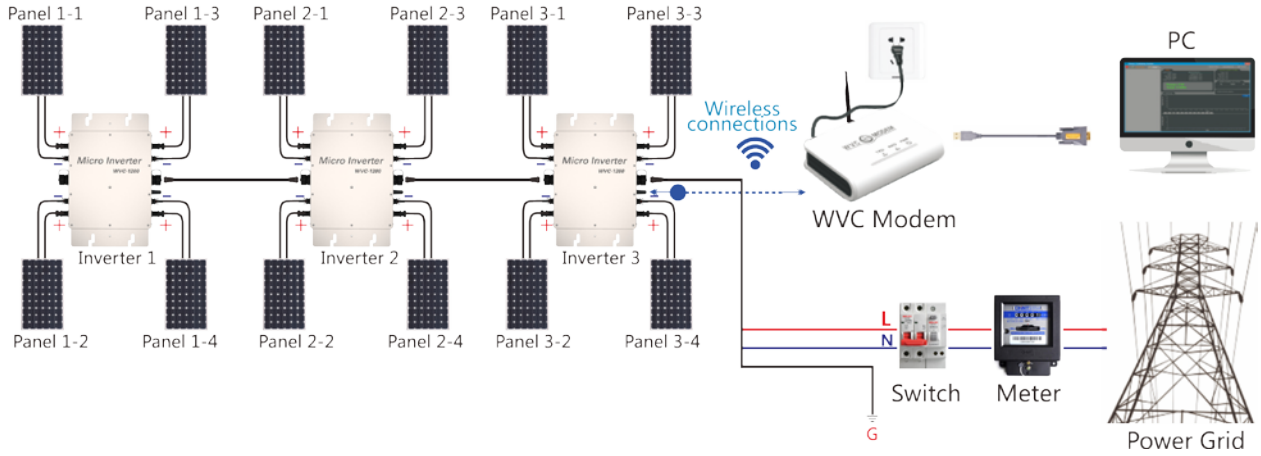
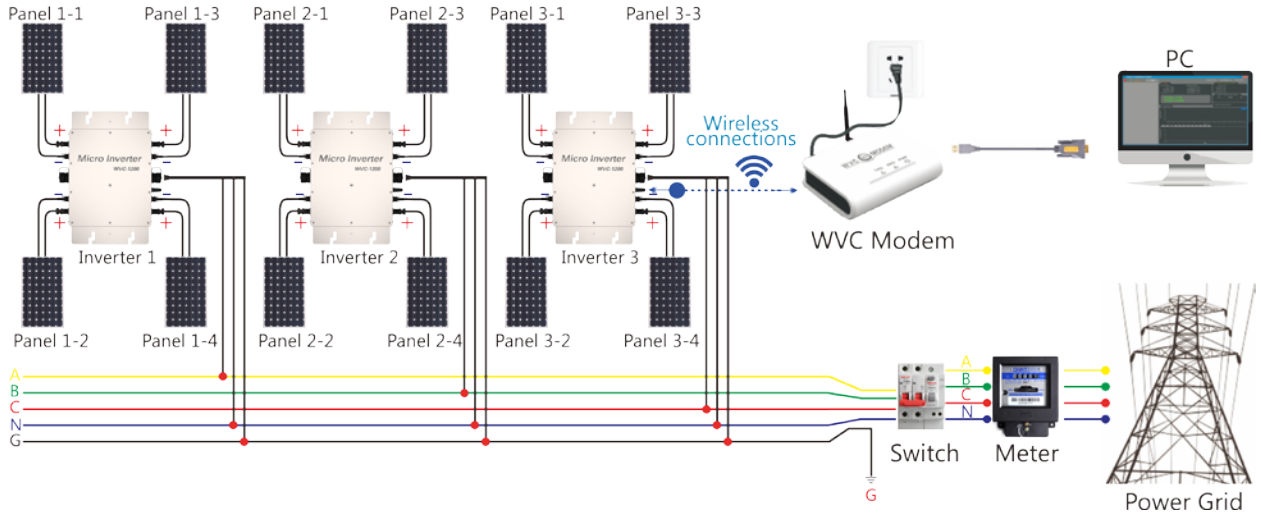
Electrical schematics

Single-phase electrical schematics



Three-phase electrical schematics



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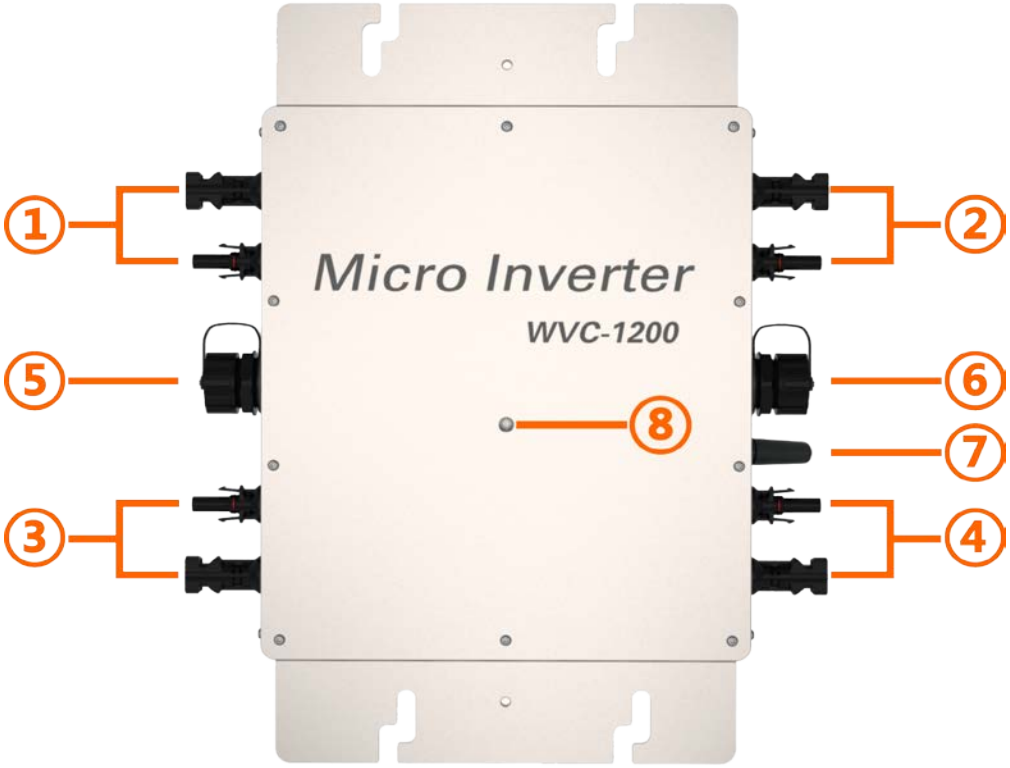


①PV Panel Input 1

②PV Panel Input 2

③PV Panel Input 3

④PV Panel Input 4

⑤AC Input – Connect to the Previous

⑥AC Output – Connect to the Next

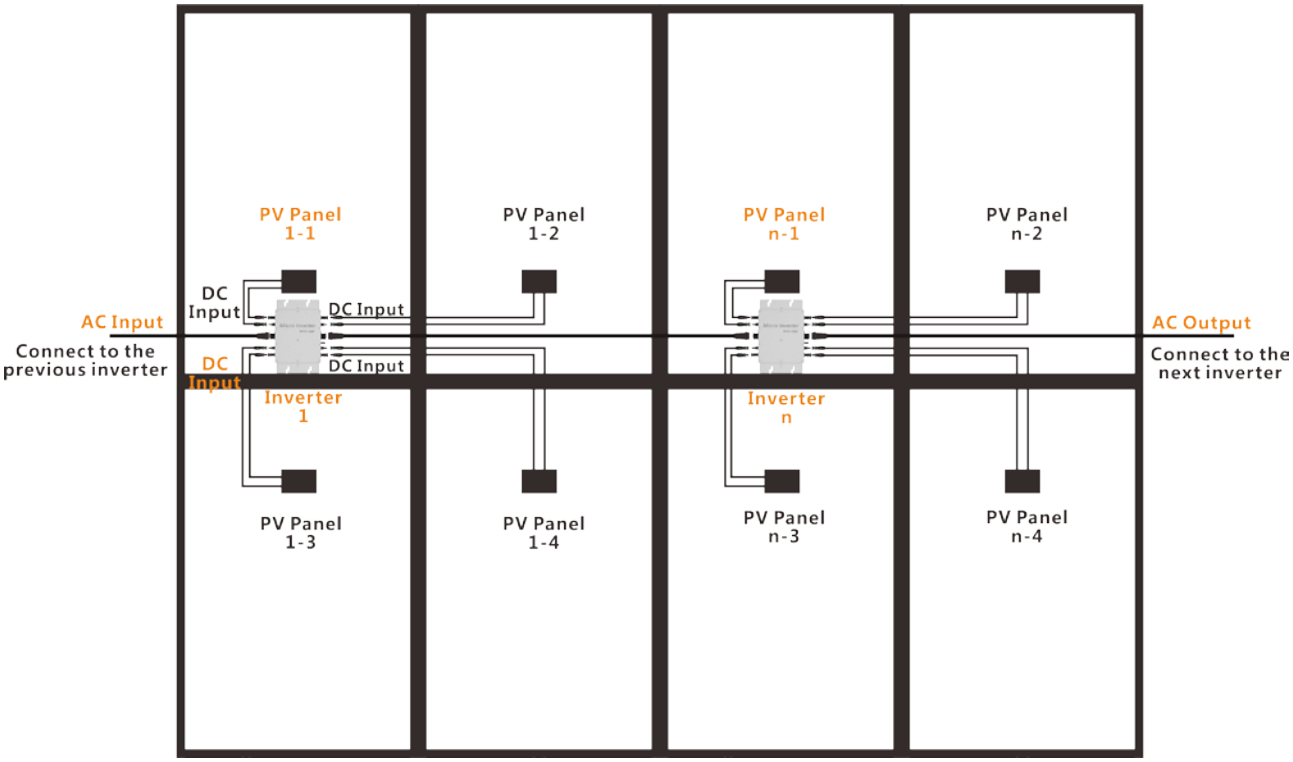
⑦433/462MHz Wireless Line

⑧LED Display

WVC-1200 (Wireless)

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。



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