

WVC-1200 MICRO INVERTER



WVC-1200 micro inverter with Aluminum alloy shell & IP67 & waterproof streamline design, built-in high-performance Maximum Power Point Tracking (MPPT) function, more better to track change on solar luminosity and control different output power, effectively capture and collect sunlight. AC electric power transmission based on advanced reverse transmission technology which is one of our patented technologies, load priority and the rest electricity to the grid, high electricity transmission efficiency up to 99%. Excellent stability, reliability, safety and heat dissipation. Perfect communication solution of power line carrier technology between micro inverter and collector, RS232 serial port / WIFI wireless communication between collector and PC. Intelligent monitoring system, the collector is able to collect / track real-time data on each PV module and transmit to PC, user can easily control micro inverter's startup / shutdown / power regulation by software. Ingenious and modular connection accessories(cable and connector) for micro inverter cluster to ensure economy, easy installation and safety.



High performance micro inverter

- Input / output isolated to protect safety
- Rapid MPPT tracking technology
- Superior PV energy harvest
- Excellent thermal performance
- High overload capacity

Easy and afford to install

- Lightweight and compact size
- Outdoor application with firm IP67
- Ingenious and modular end connection
- Reverse connection prevention design
- Flexible installation

Data transmission & communication

- Intelligent remote monitoring system
- Real-time data for each PV module
- Power line carrier communication
- Wifi / RS232 serial communication
- LED indication implies system status

Cost advantages

- Wide input voltage for variety of modules
- Higher performance-to-price-ratio
- Low transport cost by small size design
- Low maintenance expense

INPUT DATA	WVC-1200 (120VAC / 230VAC)
Recommended input power	1200 watt
Recommended PV modules	4 × 300W / Vmp, 34VDC < Voc < 50VDC
Maximum input DC voltage	50VDC
Peak power tracking voltage	25VDC - 40VDC
Operating voltage range	17VDC - 50VDC
Min. / Max. Start voltage	22VDC - 50VDC
Maximum DC short current	80A
Maximum input current	54.4A

OUTPUT DATA	@120VAC	@230VAC
Peak output power	1200 watt	1200 watt
Rated output power	1150 watt	1150 watt
Rated output current	9.58A	5A
Rated voltage range*	80VAC - 160VAC	180VAC - 260VAC
Rated frequency range*	57 - 62.5Hz	47 - 52.5Hz
Power factor (cos φ)	>0.98	>0.98
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%
Average efficiency	88%	88%
Consumption at night	<50mW Max.	<70mW Max.
THD	<5%	<5%

OPERATING CONDITIONS / DIMENSIONS / APPLICATIONS	WVC-1200 (120VAC / 230VAC)
Environment temperature	-40°C ~ +60°C
Operating temperature (Inside inverter)	-40°C ~ +82°C
Electrical isolation	Transformer
Cooling concept	Self - cooling
Degree of protection (Waterproof)	IP67
Communication mode	Power line carrier, RS232, WiFi (optional)
Power transmission mode	Reverse transfer, load priority
Dimensions (W×H×D mm)	370mm × 305mm × 38mm
Net weight (Kg)	4.2Kg
Electromagnetic compatibility	EN50081. PART 1, EN50082. PART 1
Grid disturbance	EN61000-3-2, Safety 62109
Grid detection	DIN VDE 1026, UL1741
Certifications	CEC, CE

* AC rated voltage range and frequency range depend on local standards.

* The monitoring software has ability to simultaneously run multiple thread of 6 units power line collectors and 600 units micro inverter.