

WVC-600(Life)



IoT Monitoring Platform

Smart mobile "core" life

- CO-2 induced environmental analysis
- Daily and total energy generation in kWh
- Actual DC input voltage, current and power
- Actual AC output voltage, current and power
- Inverter temperature
- Historical (daily, weekly, monthly) power curve
- Power losses due to weather induced effects
- Optional limitation of power output
- Online switch for the inverter start stop

Parameter Table

Model	WVC-600	
Maximum power input	2*375Watt	
Output voltage mode	120/230V	
PV Open circuit voltage	33-60VDC	
Operating voltage range	22-60V	
Starting voltage range	22-60V	
Short-circuit current	2*15A	
Maximum working current	2*12A	
Output parameters	@120V	@230V
Output peak power	600Watt	600Watt
Rated output power	580Watt	580Watt
Output current	5A	2.6A
AC voltage range	85-160VAC	180-280VAC
AC frequency range	48-51Hz/58-61Hz	48-51Hz/58-61Hz
Power factor	>95%	>95%
Number of branch connections.	6PCS (Single)	12PCS (Single)
Output efficiency	@120V	@230V
Static MPPT efficiency	99.5%	99.5%
Max output efficiency	95%	95%
Loss of power at night	<0.5W	<0.5W
Total current harmonics	<5%	<5%
Appearance and technical features		
Temperature range	-20°C to +50°C	
Size (L×W×H)	283mm×200mm×41.6mm	
Net amount	1.56kg	
Waterproof grade	Ip65 NEMA3R	
Heat dissipation mode	Self-cooling	
Communication mode	Wi-Fi	
Power transmission mode	Reverse transmission, Load priority	
Monitoring system	APP	
Electromagnetic Detection	EN61000-6-1:2007 EN6100-6-3:2007 + A1:2011 + AC:2012	
Power Grid standard	EN50549-1、 EN 50549-2、 NBR 16149:2013、 UL1741	
Power grid detection	IEC/EN 62109-1、 IEC/EN 62109-2、 IEC 62116、 IEEE 1547	
Certificate	CE, CEC, ETL, VDE, TUV	



Multi Busbar Monocrystalline Half Cell PV Module

Power Output	Power Tolerance	Maximum Efficiency
300W	±5%	22.0%

Assembled with multi-busbar cells, reduce shading effect on the energy generation, lower risk of hot spot

Pass the test for weather resistance in harsh environments (salt mist, ammonia corrosion and sand)

PID Process optimization of high efficiency PERC solar cell and strict control on raw materials to ensure highly resistance against PID of PV module

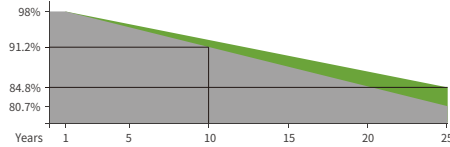
Composite material EV imported from Japan, the maximum bending degree can reach 45°

Series and parallel design, reduce the series resistance RS of module, reduce the loss of internal electrical performance, and improve the power generation capacity of whole system.

Cutting solar cell technology, which significantly reduces string current and module damage, it is good choice for projects in high temperature areas.

Quality Assurance

- 20 years Product Warranty
- 25 years Linear Power Output Warranty
- The attenuation of the power output in the first year ≤2%, the annual average attenuation after the first year ≤0.55%



* More details please read the guarantee letter.

Product Certification & Management Certification

- FCC - FCC Part 15 Subpart B HK2205071886E-R02
- CE - EN 55032:2015 + A1:2020 + A11:2020 EN 55035:2017 + A11:2020 HK2205071885E-R01
- ROHS - HK2205073274R-R01
- PSE - J 55032(H29) HK2205091915E-R01



Electrical performance parameters (STC)

Power Output	Pmax(W)	300
Rated Power Maximum Voltage	Vmp(V)	38
Rated Power Maximum Current	Imp(A)	7.89
Open Circuit Voltage	Voc(V)	45.6
Short Circuit Current	Isc(A)	8.67
Module Efficiency	(%)	22.0
Power Tolerance	(W)	±5%

* STC: 1000W/m2 irradiance, 25°C module temperature, AM1.5 spectrum.

Electrical performance parameters (NMOT)

Power output	Pmax (W)	224.7
Rated Power Maximum Voltage	Vmp (V)	35.34
Rated Power Maximum Current	Imp (A)	6.35
Open Circuit Voltage	Voc (V)	42.40
Short Circuit Current	Isc (A)	6.99

* NMOT:800W/m2 irradiance, 20°C module temperature, 1m/s wind speed.

Structure Features

Solar Cell	182MONO(Cell)
Solar Cell Array	114 pcs(6x19)
Module Dimension	950×1450×30mm
Weight	16.0 kg
Surface Technology	Glass
Back sheet	White
Junction Box	IP68 rated
Cable	4mm ² , PV cable
Diode Quantity	2
Wind Pressure/Snow Pressure	2400pa / 5400pa
Connector	MC4 Compatible

* More details please read the installation manual.

Temperature Characteristics

Solar Cells Rated Working Temperature	44±2°C
Temperature Coefficient (Isc)	+0.06%/°C
Temperature Coefficient (Voc)	-0.35%/°C
Temperature Coefficient (Pmax)	-0.38%/°C

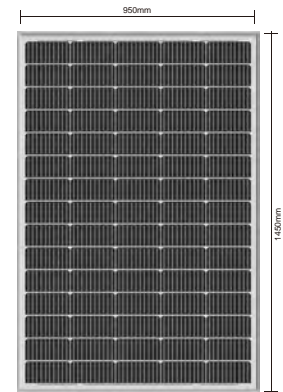
Maximum Ratings

Working Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Maximum Fuse Rated Current	20A

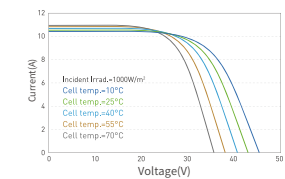
Optional

Connector	<input type="checkbox"/> Original MC4
Cable length	<input type="checkbox"/> 1000mm
Solar Module Dimension	<input type="checkbox"/> 950×1450×30mm
Back sheet color	<input type="checkbox"/> Black <input type="checkbox"/> White

Module Dimension



I-V curves of module under different temperature(380w)



I-V curves/P-V curves of module under different irradiation(380w)

