

# WVC 300, 600, 1200

## Grid-Tied Solar Micro Inverter



- High performance Maximum Power Point Tracking (MPPT)
- Intelligent monitoring system with or without WiFi
- Input/output is completely isolated to protect the electrical safety
- Multiple all parallel stacking need not be mixed & matched as in conventional ways
- Easy to install and maintain
- Flexible installation methods
- IP65 protection class for outdoor use

The WVC Series Micro Inverter delivers increased energy harvest and reduces investors' unit cost on each watt generates. It has built-in high performance Maximum Power Point Tracking (MPPT) function; precisely track changes in solar luminosity, control varied output power, and effectively collect sun energy. The inverter output power can provide load priority and transfer extra electricity to the grid.

It has 2 communication modes: power line carrier communication signals between the inverter and collector; and RS232 serial port / WIFI communication between collector and a PC or other communication devices. With PTPL<sup>®</sup> monitoring systems, the inverter can collect real-time data and master start up, shut down and power regulation easily.

### WVC 300, 600, 1200 Micro Inverter Specifications

MODEL	WVC 300	WVC 600	WVC 1200
Recommended input power	300W	600W	1200W
Recommended solar panel configuration	1x300Wp	2x300Wp	4x300Wp
Recommended solar panel type	Vmp>34V, Voc<50V		
Nominal output standards	120Vac/60Hz or 230Vac/50Hz		
<b>INPUT (DC)</b>			
Max. input voltage	50Vdc		
Peak power tracking voltage	22 - 50Vdc	25 - 40Vdc	
Operating voltage range	17 - 50Vdc		
Min. / max. start voltage	22 - 50Vdc		
Max. DC short circuit current	15A	40A	80A
Max. input current	9.8A	25A	54.4A
DC input reverse voltage protection	Fuse		
<b>OUTPUT</b>			
AC max. output power	260W	600W	1200W
Rated output power	250W	550W	1150W
Rated output current	2.08A or 0.92A	4.58A or 2.3A	9.58A or 5A
Rated output voltage range	80-160Vac or 180-260Vac		
Rated frequency range	59.5-60.5Hz or 49.5-50.5Hz	57-62.5Hz or 47-52.5Hz	59.5-60.5Hz or 49.5-50.5Hz
Power factor	>95%	>96%	>98%
Max. units per branch circuit	15 or 30 units	6 or 12 units	3 or 5 units
<b>EFFICIENCY</b>			
Static MPPT efficiency	99.5%		
Peak inverter efficiency	94.6%	92%	92%
Max. output efficiency	92.3% or 94.6%		
Average efficiency	91.2% or 93.1%		
Standby power	< 50mW or 70mW		

<b>PROTECTION</b>			
Islanding protection	VAC; FAC		
DC input reverse voltage protection	Fuse		
Output open circuit protection	Current limiting		
Display	LED		
<b>SYSTEM &amp; ENVIRONMENTAL</b>			
Communication mode	60Khz modulation, power line carrier-current communication		
Power transmission mode	Reverse transfer, load priority		
Monitoring system	Lifetime free		
LED display	Power rate, voltage, AC frequency, over voltage display		
THD	< 5%		
AC phase	< 0.5%		
Ambient temperature range	-40°C to +60°C		
Operating temperature (inside the inverter)	-40°C to +80°C		
Humidity	0-100% (Non-condensing)		
Cabinet protection class	IP65		
Cooling method	Self-cooling		
Electromagnetic compatibility	EN50081 part1, EN50082 part1		
Power system disturbance	EN61000-3-2 Safety EN62109		
Grid detection	DIN VDE 1026 UL1741		
Certificate	CE, CEC		
<b>PHYSICAL</b>			
Dimension (LxWxH) (mm)	191x176x38	289x200x38	370x305x38
Net weight (kg)	0.83	1.58	2.85
Gross weight (kg)	1.27	2.6	4.2
Inner box size (LxWxH) (cm)	240x195x70	340x245x98	435x380x120
Installation type	Fix the inverter on the PV holder		

\*Frequency ranges can be extended beyond nominal if required by the utility.

\*Specifications subject to change: Always check PTPL<sup>®</sup> label for specifications of a particular unit.