

# InfiniSolar: On-Grid Inverter with Energy Storage

## Innovative and Cost-effective Power Solution



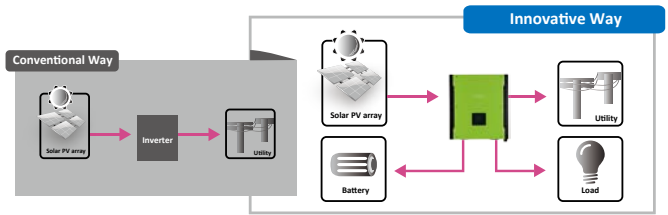
- On-Grid Inverter with Energy Storage
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- User-adjustable battery charging current suits different types of batteries
- Programmable multiple operations modes: Grid tie, Off grid, and grid-tie with backup
- Built-in timer for various mode of on/off operation
- Multiple communication for USB, RS-232, Modbus and SNMP
- Monitoring software for real time status display and control

InfiniSolar is a flexible and intelligent hybrid inverter which utilizes solar power, AC utility, and battery power source to supply continuous power. It's a simple and smart solar power storage system for home users to either store energy into battery and wait for night time usage or use for self-consumption first depending on demands. Priority for power source can be programmed and set up through smart software. During night time or power failure, it will automatically extract power from battery. In this way, it will reduce the dependence on the utility.



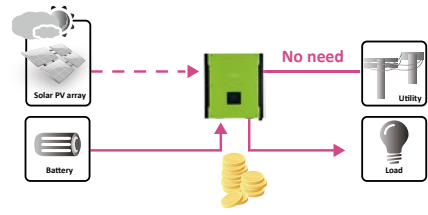
### Feed-in is not only choice

In comparison with conventional grid-tie inverter, InfiniSolar is able to not only feed-in power to grid but also store solar power to battery for future usage and directly power to the loads.



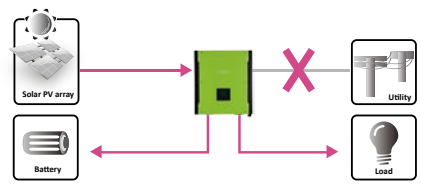
### Save money by discharging battery for self-consumption first

InfiniSolar can save money by using battery energy first when PV energy is low. Until battery energy is low, InfiniSolar will extract AC power from the grid.



### Power backup when AC failed

InfiniSolar can operate as an off-grid inverter to provide continuous power even without the grid. It's perfect power solution for remote regions or temporary AC power source such as camping or flea market.



## InfiniSolar 2KW/3KW On-grid Inverter with Energy Storage Selection Guide

MODEL	InfiniSolar 2KW	InfiniSolar Plus 3KW
<b>PHASE</b>	1-phase in / 1-phase out	
<b>RATED OUTPUT POWER</b>	2000 W	3000 W
<b>MAXIMUM CHARGING POWER</b>	1200 W	1200 W
<b>GRID-TIE OPERATION</b>		
<b>PV INPUT (DC)</b>		
Maximum PV Input Power	2250W	4500W
Nominal DC Voltage / Maximum DC Voltage	300 VDC / 350 VDC	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	80 VDC / 120 VDC	116 VDC / 150 VDC
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC
Number of MPP Trackers / Maximum Input Current	1 / 1 x 15 A	1 / 1 x 18 A
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	101/110/120/127 VAC	208/220/230/240 VAC
Output Voltage Range	88 - 127 VAC*	184 - 264.5 VAC*
Nominal Output Current	18 A	13 A
Power Factor	> 0.99	
<b>EFFICIENCY</b>		
Maximum Conversion Efficiency (DC/AC)	95%	96%
European Efficiency@ Vnominal	94%	95%
<b>OFF-GRID OPERATION</b>		
<b>AC INPUT</b>		
AC Start-up Voltage/Auto Restart Voltage	60 - 70 VAC / 85 VAC	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	80 - 130 VAC	170 - 280 VAC
Maximum AC Input Current	30 A	
<b>PV INPUT (DC)</b>		
Maximum DC Voltage	350 VDC	500 VDC
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC
Number of MPP Trackers / Maximum Input Current	1 / 1 x 15 A	1 / 1 x 18 A
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC
Output Waveform	Pure Sinewave	
Efficiency (DC to AC)	90%	93%
<b>HYBRID OPERATION</b>		
<b>PV INPUT (DC)</b>		
Nominal DC Voltage / Maximum DC Voltage	300 VDC / 350 VDC	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	80 VDC / 120 VDC	116 VDC / 150 VDC
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC
Number of MPP Trackers / Maximum Input Current	1 / 1 x 15 A	1 / 1 x 18 A
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC
Output Voltage Range	88-127 VAC*	184 - 264.5 VAC*
Nominal Output Current	18 A	13 A
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	60 - 70 VAC / 85 VAC	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	80 - 130 VAC	170 - 280 VAC
Maximum AC Input Current	30 A	
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC
Efficiency (DC to AC)	90%	93%
<b>BATTERY &amp; CHARGER</b>		
Nominal DC Voltage	48 VDC	
Maximum Charging Current	Default 25A, 5A - 25A (Adjustable)	
<b>GENERAL</b>		
<b>PHYSICAL</b>		
Dimension, D X W X H (mm)	107 x 438 x 480	
Net Weight (kgs)	15.5	
<b>INTERFACE</b>		
Communication Port	RS-232/USB	
Intelligent Slot	Optional SNMP, Modbus, and AS-400 cards available	
<b>ENVIRONMENT</b>		
Humidity	0 ~ 90% RH (No condensing)	
Operating Temperature	0 to 40°C	0 to 40°C
Altitude	0 ~ 1000 m**	

\*These figures may vary depending on different AC voltage and country requirements.  
 \*\*Power derating 1% every 100 m when altitude is over 1000m.  
 Product specifications are subject to change without further notice.

CE VDE-AR-N 4105  
 VDE 0126-1-1  
 AS4777, AS/NZS3100  
 NRS-097-2-1



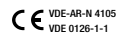
## Infinisolar 5KW On-grid Inverter with Energy Storage Selection Guide

MODEL		InfiniSolar 5KW	
<b>PHASE</b>		1-phase in / 1-phase out	
<b>RATED OUTPUT POWER</b>		5000 W	
<b>MAXIMUM CHARGING POWER</b>		4800 W	
<b>GRID-TIE OPERATION</b>			
<b>PV INPUT (DC)</b>			
Maximum PV Input Power	10000W		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC		
Start-up Voltage / Initial Feeding Voltage	225 VDC / 250 VDC		
MPP Voltage Range	250 VDC ~ 850 VDC		
Number of MPP Trackers / Maximum Input Current	2 / 2 x 10.0A		
<b>GRID OUTPUT (AC)</b>			
Nominal Output Voltage	230 VAC		
Output Voltage Range	184 - 265 VAC*		
Nominal Output Current	21 A		
Power Factor	> 0.99		
<b>EFFICIENCY</b>			
Maximum Conversion Efficiency (DC/AC)	> 96%		
European Efficiency@ Vnominal	> 95%		
<b>OFF-GRID OPERATION</b>			
<b>AC INPUT</b>			
AC Start-up Voltage/Auto Restart Voltage	120 - 140 VAC / 180 VAC		
Acceptable Input Voltage Range	170 - 280 VAC		
Maximum AC Input Current	40A (Include Loads and Charging)		
<b>PV INPUT (DC)</b>			
Maximum DC Voltage	900 VDC		
MPP Voltage Range / Full Load MPP Voltage Range	350 VDC ~ 850 VDC		
Number of MPP Trackers / Maximum Input Current	2 / 2 x 10.0A		
<b>BATTERY MODE OUTPUT (AC)</b>			
Nominal Output Voltage	230 VAC		
Output Waveform	Pure Sinewave		
Efficiency (DC to AC)	91%		
<b>HYBRID OPERATION</b>			
<b>PV INPUT (DC)</b>			
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC		
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC		
MPP Voltage Range	350 VDC ~ 850 VDC		
Number of MPP Trackers / Maximum Input Current	2 / 2 x 10.0A		
<b>GRID OUTPUT (AC)</b>			
Nominal Output Voltage	230 VAC		
Output Voltage Range	184 - 265 VAC*		
Nominal Output Current	21A		
<b>AC INPUT</b>			
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC		
Acceptable Input Voltage Range	170 - 280 VAC		
Maximum AC Input Current	40A		
<b>BATTERY MODE OUTPUT (AC)</b>			
Nominal Output Voltage	230 VAC		
Efficiency (DC to AC)	92%		90%
<b>BATTERY &amp; CHARGER</b>			
Nominal Battery Voltage	48 VDC		48 VDC
Battery Shutdown Voltage	Default 42 VDC ,40-50 VDC (Adjustable)		Default 42 VDC, 40 - 54VDC (Adjustable)
Maximum Charging Current	Default 60A, 5A - 100A (Adjustable)		Default 60A, 5A - 100A (Adjustable)
Absorption Charger Voltage	Default 56 VDC, 50 - 60 VDC (Adjustable)		Default 56 VDC, 50 - 64 VDC (Adjustable)
Floating Charger Voltage	Default 54 VDC, 50 - 60 VDC (Adjustable)		Default 54 VDC, 50 - 64 VDC (Adjustable)
Battery Overcharge Protection	62 VDC		66 VDC
<b>GENERAL</b>			
<b>PHYSICAL</b>			
Dimension, D X W X H (mm)	550 x 438 x 120		
Net Weight (kgs)	16		
<b>INTERFACE</b>			
Communication Port	RS-232/USB		
Intelligent Slot	Optional SNMP, Modbus, and AS-400 cards available		
<b>ENVIRONMENT</b>			
Humidity	0 ~ 90% RH (No condensing)		
Operating Temperature	-10 to 55°C		
Altitude	0 ~ 1000 m*		

\*These figures are based on VDE-4105 standard. All figures may vary depending on different AC voltage and country requirements.

\*Power derating 1% every 100 m when altitude is over 1000m

Product specifications are subject to change without further notice.



## Infinisolar 10KW Three Phase On-grid Inverter with Energy Storage Selection Guide

MODEL	InfiniSolar Three Phase 10KW
<b>PHASE</b>	3-phase in / 3-phase out
<b>RATED OUTPUT POWER</b>	10000 W
<b>MAXIMUM CHARGING POWER</b>	9600 W
<b>GRID-TIE OPERATION</b>	
<b>PV INPUT (DC)</b>	
Maximum PV Input Power	14850W
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPP Voltage Range / Full Load MPP Voltage Range	350 VDC ~ 850 VDC / 400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 18.6A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 - 265 VAC per phase
Nominal Output Current	14.5 A per phase
Power Factor	> 0.99
<b>EFFICIENCY</b>	
Maximum Conversion Efficiency (DC/AC)	> 96%
European Efficiency@ Vnominal	> 95%
<b>OFF-GRID OPERATION</b>	
<b>AC INPUT</b>	
AC Start-up Voltage/Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase
Maximum AC Input Current	40A
<b>PV INPUT (DC)</b>	
Maximum DC Voltage	900 VDC
MPP Voltage Range / Full Load MPP Voltage Range	350 VDC ~ 850 VDC / 400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 18.6A
<b>BATTERY MODE OUTPUT (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Waveform	Pure Sinewave
Efficiency (DC to AC)	91%
<b>HYBRID OPERATION</b>	
<b>PV INPUT (DC)</b>	
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPP Voltage Range / Full Load MPP Voltage Range	350 VDC ~ 850 VDC / 400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 18.6A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184 - 265 VAC per phase
Nominal Output Current	14.5 A per phase
<b>AC INPUT</b>	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase
Maximum AC Input Current	40A
<b>BATTERY MODE OUTPUT (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (DC to AC)	91%
<b>BATTERY &amp; CHARGER</b>	
Nominal DC Voltage	48 VDC
Maximum Charging Current	Default 60A, 10A - 200A (Adjustable)
<b>GENERAL</b>	
<b>PHYSICAL</b>	
Dimension, D X W X H (mm)	622 x 500 x 167.5
Net Weight (kgs)	45
<b>INTERFACE</b>	
Communication Port	RS-232/USB and CAN Interface
Intelligent Slot	Optional SNMP, Modbus, and AS-400 cards available
<b>ENVIRONMENT</b>	
Humidity	0 ~ 90% RH (No condensing)
Operating Temperature	-10 to 55°C
Altitude	0 ~ 1000 m*

\*Power derating 1% every 100 m when altitude is over 1000m  
 Product specifications are subject to change without further notice.

