

InfiniSolar: On-Grid Inverter with Energy Storage

Innovative and Cost-effective Power Solution

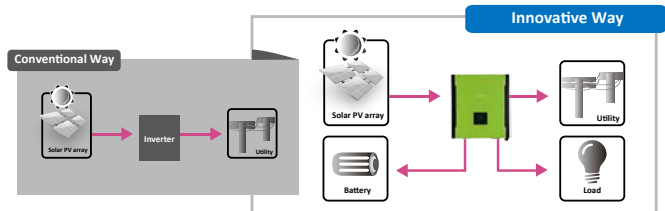
InfiniSolar is a flexible and intelligent hybrid inverter which utilizes solar power, AC utility, and battery power source to supply continuous power. It's a simple and smart solar power storage system for home users to either store energy into battery and wait for night time usage or use for self-consumption 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.

- 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



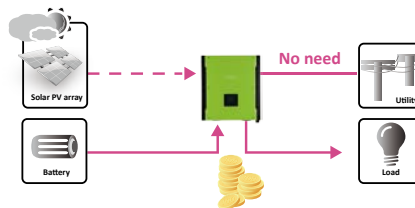
■ Feed-in is not only choice

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.



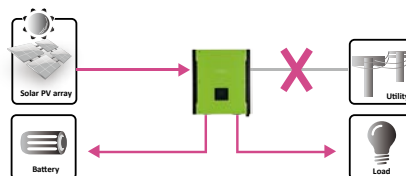
■ Save money by discharging battery for self-consumption first

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 On-grid Inverter with Energy Storage Selection Guide

MODEL	InfiniSolar 2KW	InfiniSolar Plus 3KW
PHASE	1-phase in / 1-phase out	
RATED OUTPUT POWER	2000 W	3000 W
MAXIMUM CHARGING POWER	1200 W	1200 W
GRID-TIE OPERATION		
PV INPUT (DC)		
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
GRID OUTPUT (AC)		
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	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	95%	96%
European Efficiency@ Vnominal	94%	95%
OFF-GRID OPERATION		
AC INPUT		
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	
PV INPUT (DC)		
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
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC
Output Waveform	Pure Sinewave	
Efficiency (DC to AC)	90%	93%
HYBRID OPERATION		
PV INPUT (DC)		
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
GRID OUTPUT (AC)		
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
AC INPUT		
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	
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC
Efficiency (DC to AC)	90%	93%
BATTERY & CHARGER		
Nominal DC Voltage	48 VDC	
Maximum Charging Current	Default 25A, 5A - 25A (Adjustable)	
GENERAL		
PHYSICAL		
Dimension, D X W X H (mm)	107 x 438 x 480	
Net Weight (kgs)	15.5	
INTERFACE		
Communication Port	RS-232/USB	
Intelligent Slot	Optional SNMP, Modbus, and AS-400 cards available	
ENVIRONMENT		
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 On-grid Inverter with Energy Storage Selection Guide

MODEL	InfiniSolar 5KW
PHASE	1-phase in / 1-phase out
RATED OUTPUT POWER	5000 W
MAXIMUM CHARGING POWER	4800 W
GRID-TIE OPERATION	
PV INPUT (DC)	
Maximum PV Input Power	10000W
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	200 VDC / 250 VDC
MPP Voltage Range	250 VDC ~ 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 10.0A
GRID OUTPUT (AC)	
Nominal Output Voltage	230 VAC
Output Voltage Range	184 - 265 VAC*
Nominal Output Current	21 A
Power Factor	> 0.99
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	> 96%
European Efficiency@ Vnominal	> 95%
OFF-GRID OPERATION	
AC INPUT	
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)
PV INPUT (DC)	
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
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	230 VAC
Output Waveform	Pure Sinewave
Efficiency (DC to AC)	91%
HYBRID OPERATION	
PV INPUT (DC)	
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
GRID OUTPUT (AC)	
Nominal Output Voltage	230 VAC
Output Voltage Range	184 - 265 VAC*
Nominal Output Current	21A
AC INPUT	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	170 - 280 VAC
Maximum AC Input Current	40A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	230 VAC
Efficiency (DC to AC)	91%
BATTERY & CHARGER	
Nominal DC Voltage	48 VDC
Maximum Charging Current	Default 60A, 5A - 60A (Adjustable)
GENERAL	
PHYSICAL	
Dimension, D X W X H (mm)	522 x 500 x 167.5
Net Weight (kgs)	40
INTERFACE	
Communication Port	RS-232/USB
Intelligent Slot	Optional SNMP, Modbus, and AS-400 cards available
ENVIRONMENT	
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
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Infinisolar Three Phase On-grid Inverter with Energy Storage Selection Guide

MODEL	InfiniSolar Three Phase 10KW
PHASE	3-phase in / 3-phase out
RATED OUTPUT POWER	10000 W
MAXIMUM CHARGING POWER	9600 W
GRID-TIE OPERATION	
PV INPUT (DC)	
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
GRID OUTPUT (AC)	
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
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	> 96%
European Efficiency@ Vnominal	> 95%
OFF-GRID OPERATION	
AC INPUT	
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
PV INPUT (DC)	
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
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Waveform	Pure Sinewave
Efficiency (DC to AC)	91%
HYBRID OPERATION	
PV INPUT (DC)	
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
GRID OUTPUT (AC)	
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
AC INPUT	
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
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (DC to AC)	91%
BATTERY & CHARGER	
Nominal DC Voltage	48 VDC
Maximum Charging Current	Default 60A, 10A - 200A (Adjustable)
GENERAL	
PHYSICAL	
Dimension, D X W X H (mm)	622 x 500 x 167.5
Net Weight (kgs)	45
INTERFACE	
Communication Port	RS-232/USB and CAN Interface
Intelligent Slot	Optional SNMP, Modbus, and AS-400 cards available
ENVIRONMENT	
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.

