# InfiniSolar: On-Grid Inverter with Energy Storage

### Innovative and Cost-effective Power Solution



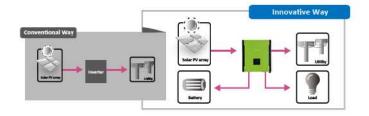
- On-Grid Inverter with Energy Storage
- · Self-consumption and Feed-in to the grid
- · Programmable supply priority for PV, Battery or Grid
- · User-adjustable battery charging current suits different types of
- · Programmable multiple operations modes: Grid tie, Off grid, and grid-tie with backup
- · 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.



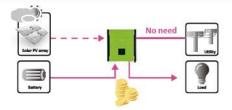
#### Feed-in is not only choice

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



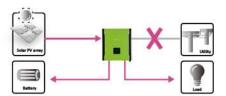
#### Save money by discharging battery for self-consumption first

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.



## Inifinisolar 5KW 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	
IRID-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	225 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	322 3/2/1/27 22/1/2	
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	
Efficiency (DC to AC)	92%	90%
BATTERY & CHARGER	12.00	Na and a second
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
GENERAL		
HYSICAL STORY AND A SOCIETY AN		
Dimension, D X W X H (mm)	550 x 438 x 120	
Net Weight (kgs)	16	
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.		

<sup>\*</sup>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.

