



Infinity 18kW

On-Grid Inverter with Energy Storage

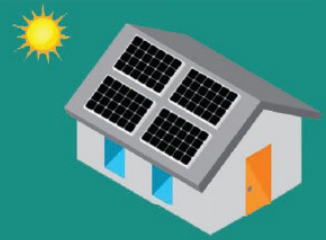
Phase Independent Grid-Tie & Hybrid Inverter
with Optional LiPO ESS 5Kwh / 10Kwh



INVERTERS

Plug & Play
ESS

PV Capacity 19500 W



Data Logging & Storage Portal
Inbuilt Wifi 4G with MOBILE APP
Compatible with Lithium Batteries
Netmetering standards compliance

- ◆ Pure sine wave output
- ◆ Self-Consumption & Feed-in to the grid
- ◆ Programmable supply priority for PV, Battery or Grid
- ◆ User-adjustable charging Current & Voltage
- ◆ Programmable multiple operation modes: Grid-tie, off-grid & grid-tie with backup
- ◆ Monitoring software for real-time status display & control
- ◆ Option of 5 Kwhr & 10 Kwhr battery bank inside
- ◆ Additional external battery connection can add more capacity



INFINITY 18kW

ON-GRID INVERTER WITH ENERGY STORAGE SPECIFICATION



INFINITY 18kW HYBRID ON & OFF-GRID INVERTER WITH ENERGY STORAGE OPTION & INTELLIGENT MANAGEMENT

MODEL	Infinity 18kW 3Pi	Infinity 18kW 3P	Infinity 18kW 1 ph
PHASE	3-Phase in / out	3x1 ph or 3 ph - in / out	1-Phase in / out
Maximum PV Input Power	19500W	19500W	19500W
Rated Output Power	18 kW - 3ph	18 kW x 3 - 1ph	18 kW - 1ph
Maximum Charging Power	11.52 kW DC	11.52 kW DC	11.52 kW DC
Mode	On-Grid / Off- Grid		
Battery Less Operation	Yes	No	No
Touch Screen LCD HMI	7"		
Load Priority AC Output Ports	3 Hi + 3 Lo		
GRID-TIE OPERATION			
PV INPUT (DC)			
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC		
Start-up Voltage / Initial Feeding Voltage	130 VDC / 150 VDC		
MPP Voltage Range	120 VDC ~ 430 VDC		
Number of MPP Trackers / Maximum Input Current	3 x 27A		
GRID OUTPUT (AC)			
Nominal Output Voltage	220/230/240 VAC		
Output Voltage Range	184-264.5 VAC or 195.5-253 VAC (Selectable)		
Nominal Output Current	3 x 21.7A	3 x 21.7A	65A
Power Factor	>0.99		
EFFICIENCY			
Maximum Conversion Efficiency (DC/AC)	96%		
OFF-GRID OPERATION			
AC INPUT			
AC Start-up Voltage / Auto Restart Voltage	120-140 VAC / 180 VAC		
Acceptable Input Voltage Range	90-280 VAC or 170-280 VAC		
Frequency Range	50 Hz/60 Hz (Auto Sensing)		
Maximum AC Input Current	3 x 40A	3 x 40A	120A
PV INPUT (DC)			
Maximum DC Voltage	500 VDC		
MPP Voltage Range	120 VDC ~ 430 VDC		
Number of MPP Trackers / Maximum Input Current	3 x 27A		
BATTERY MODE OUTPUT (AC)			
Nominal Output Voltage	220-230-240 VAC		
Output Waveform	Pure Sine Wave		
Efficiency (DC to AC)	95%		
HYBRID OPERATION			
PV INPUT (DC)			
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 450 VDC		
Start-up Voltage / Initial Feeding Voltage	130 VDC / 150 VDC		
MPP Voltage Range	120 VDC ~ 430 VDC		
Number of MPP Trackers / Maximum Input Current	3 x 27A		
GRID OUTPUT (AC)			
High & Low Priority Output Ports	Yes		
Low Port Derated Output (Batteryless Mode)	Yes		
Nominal Output Voltage	220-230-240 VAC		
Output Voltage Range	184-264.5 VAC or 195.5-253 VAC (Selectable)		
Nominal Output Current	3 x 21.7A	3 x 21.7A	65A
AC INPUT			
AC Start-up Voltage / Auto Restart Voltage	120-140 VAC ~ 180 VAC		
Acceptable Input Voltage Range	90-280 VAC or 170-280 VAC		
Maximum AC Input Current	3 x 40A	3 x 40A	120A
BATTERY MODE OUTPUT (AC)			
ESS	10 Kwhr / 5 Kwhr		
Nominal Output Voltage	220-230-240 VAC		
Output Waveform	Pure Sine Wave		
Efficiency (DC to AC)	96%		
BATTERY & CHARGER			
Nominal DC Voltage	48 VDC		
Maximum Solar Charging Current	240 A		
Maximum AC Charging Current	240 A		
Maximum Charging Current	240 A		
ESS Battery Capacity Option	5Kwhr / 10Kwhr		
GENERAL			
PHYSICAL			
Dimension D x W x H (mm)	750 x 320 x 1000		
Net Weight (kgs)	65 / 105 / 145		
INTERFACE			
Communication Port	USB or RS-232/Dry Contact, WiFi		
ENVIRONMENT			
Humidity	0~90% RH (No Condensing)		
Operating Temperature	-10°C to 50°C		

Product specifications are subject to change without further notice.

SPECIFICATION	BASIC PARAMETERS	10 KWhr
Nominal	Nominal Voltage (V)	48
	Nominal Capacity (Wh)	9,600
	Usable Capacity (Wh)	9,120
Physical	Dimension (mm)	Inside the Inverter
	Additional Weight (kg)	80
Electrical	Discharge Voltage (Vdc)	44.5
	Charge Voltage (Vdc)	52.5 ~ 53.5
	Charge / Discharge Current (Amps)	100 (Recommended)
		150 (Max)
180 (Peak@15s)		
Others	Communication Port	RS485,CAN
	No of Cells	16 x 2
	Working Temperature/°C	0 ~ 50 Charge
		-10 ~ 50 Discharge
	Shelf Temperature/°C	-20 ~ 60
	Altitude (M)	< 2000
	IP Rating	IP20
	Humidity (RH)	5 ~ 95%
	Certification	IEC62619/CE/UN38.3
	Design Life	10+ Years (25°C/77°F)
Cycle Life	>4,500 (25°C)	

SPECIFICATION	BASIC PARAMETERS	5 KWhr
Nominal	Nominal Voltage (V)	48
	Nominal Capacity (Wh)	4,800
	Usable Capacity (Wh)	4,560
Physical	Dimension (mm)	Inside the Inverter
	Additional Weight (kg)	40
Electrical	Discharge Voltage (Vdc)	44.5
	Charge Voltage (Vdc)	52.5 ~ 53.5
	Charge / Discharge Current (Amps)	50 (Recommended)
		75 (Max)
90 (Peak@15s)		
Others	Communication Port	RS485,CAN
	No of Cells	16
	Working Temperature/°C	0 ~ 50 Charge
		-10 ~ 50 Discharge
	Shelf Temperature/°C	-20 ~ 60
	Altitude (M)	< 2000
	IP Rating	IP20
	Humidity (RH)	5 ~ 95%
	Certification	IEC62619/CE/UN38.3
	Design Life	10+ Years (25°C/77°F)
Cycle Life	>4,500 (25°C)	