



POWER GENERATION  
FOR GENERATIONS



## IS YOUR SOLAR GRID FUTURE READY?

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NOVERGY'S IPCV MULTI-MODE INVERTERS OFFER ADVANCED FLEXIBILITY & FUNCTIONALITY IN A SINGLE PRODUCT. ONLY FEW CAN PROMISE.

## ADAPTIVE AND SMART WITH ROBUST FEATURES



The IPCV series is an intelligent & smart solar inverter for different scenarios in a single unit. Back up your solar power during the day to use at night. Feed power to the grid or use it as a grid-tie inverter with battery backup. Program and set up your priority power sources with the supporting software. During power failures the inverter automatically switches to emergency mode to extract power from the battery.



## MULTI-MODE OPERATION IN SINGLE UNIT

A single unit serves multiple purposes.

1. On-grid inverter
2. Off-grid Inverter
3. On-grid with Battery Backup
4. Serves as a UPS also



## BACK UP FOR LONGER DURATIONS

As compared to a conventional grid-tie inverter, IPCV series are able to not only feed-in power to the grid but also back up power for future usage or during power outage.



## REDUCES ELECTRICITY BILLS WITH SOLAR PRIORITY

The inverter uses the battery energy first when the photovoltaic (PV) energy is low. IPCV extracts AC power from the grid only when the battery's energy is low. Thus ensuring that the maximum energy from solar panels is utilized to feed the loads.



## RESPONDS TO POWER FAILURE RIGHT AWAY

Operates as an off-grid inverter to provide continuous power even without the grid. It is also a great power solution for remote regions or temporary AC power source. Further it also removes the need for a separate Home / Office UPS.



## RELIABLE AND SAFE WITH EFFICIENCY UPTO 96%

Pure Sine-wave output makes it ideal for all your appliances. like Fans, Lights, TV, Computer, etc. The solar MPPT charger draws maximum power from Solar panels and ensures that the solar energy harvest is most optimal.



## LCD DISPLAY FOR REAL-TIME POWER TRACKING

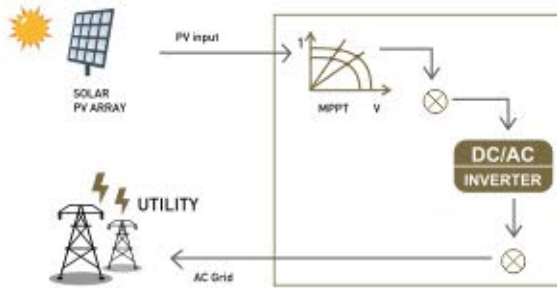
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- User-adjustable battery charging current to optimise life for different types of batteries
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with battery backup
- Built-in timer for on/off operation of modes



# MULTIPLE OPERATION MODES, A WIN-WIN FOR ALL SCENARIOS

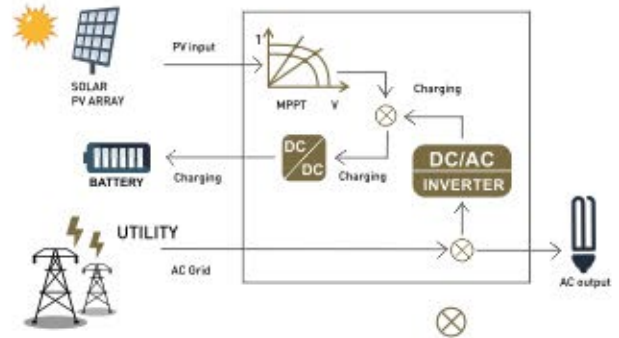
## Grid Tie:

Daytime or sunny day, caters to AC loads and works as an on grid inverter by exporting excess power to grid

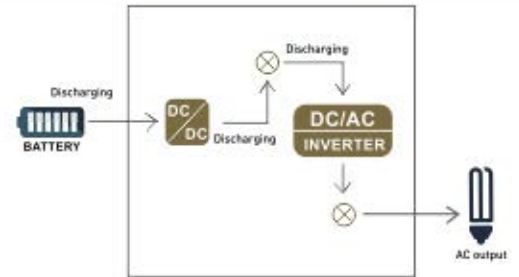


## Off Grid:

Daytime or sunny day, caters to AC loads and charges the battery

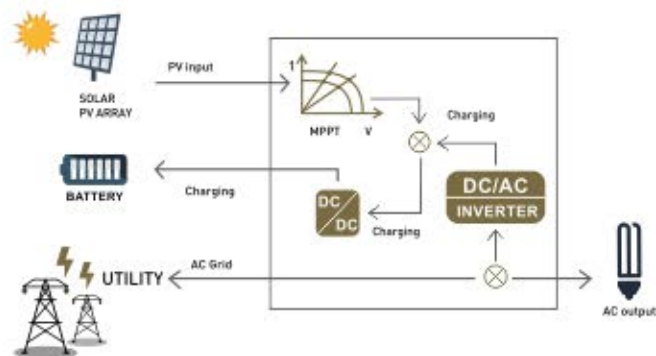


During night hours or while discharging or grid failure.

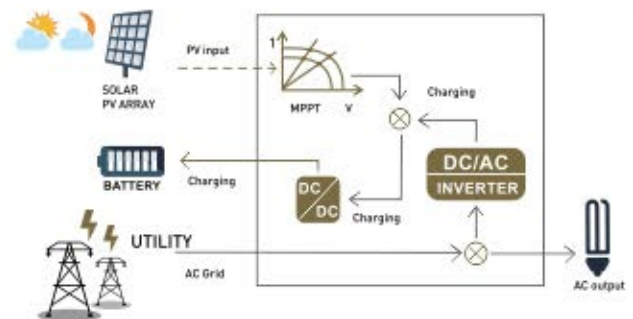


## Grid Tie with backup power

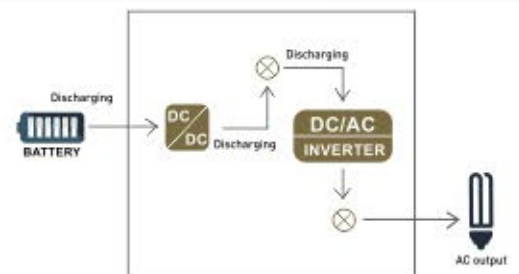
Daytime or sunny day, works as an on grid inverter and charges the battery



Cloudy or foggy day, works as an off grid inverter drawing balance power from grid if required.



During night hours or while discharging or grid failure.



# TECHNICAL SPECIFICATION

MODEL	IPCV - 2kw	IPCV - 3kw	IPCV - 4kw	IPCV - 5kw	IPCV - 10kw (3phase)
<b>PHASE</b>		1-phase in / 1- phase out	1-phase in/1-phase out		3 - phase in / 3 - phase out
<b>MAXIMUM PV INPUT POWER</b>	2250 W	3200 W	5000 W	5500 W	14850 W
<b>RATED OUTPUT POWER</b>	2000 W	3000 W	4000 W	5000 W	10000 W
<b>MAXIMUM CHARGING POWER</b>		3200 W	4000 W	4800 W	9600 W
<b>GRID-TIE OPERATION</b>					
<b>PV INPUT (DC)</b>					
Nominal DC Voltage / Maximum DC	300 VDC / 350 VDC	360 VDC / 500 VDC	360 VDC / 580 VDC	360 VDC / 680 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding	80 VDC / 120 VDC	116 VDC / 150 VDC	116 VDC / 150 VDC	116 VDC / 150 VDC	320 VDC / 350 VDC
MPP Voltage Range	120 VDC ~ 320 VDC	250 VDC ~ 450 VDC	280 VDC ~ 500 VDC	100 VDC ~ 680 VDC	400 VDC / 800 VDC
Number of MPP Trackers / Maximum	1 / 1 x 15 A	1 / 1 x 15 A	1 / 1 x 18 A	2 / 2 x 15 A	2 / 2 x 18.6A
<b>GRID OUTPUT (AC)</b>					
Nominal Output Voltage	101/110/120/127 VAC	208/220/230/240 VAC	202/208/220/230/240 VAC	208/220/230/240 VAC	230 VAC(P-N) / 400 VAC (P-P)
Output Voltage Range	88 - 127 VAC*	184 - 265 VAC*	184-264.5 VAC*	184 - 265 VAC*	184 - 265 VAC* per phase
Nominal Output Current	18 A	13 A	17.5A	21 A	13A per phase
Power Factor		> 0.99	>0.99	> 0.99	
<b>EFFICIENCY</b>					
Maximum Efficiency	95%			96%	
<b>OFF-GRID OPERATION</b>					
<b>AC INPUT</b>					
AC Start-up Voltage/Auto Restart	60 - 70 VAC / 85 VAC		120 -140 VAC / 180 VAC		120 -140 VAC per phase
Acceptable Input Voltage Range	80 - 130 VAC		170 - 280 VAC		170 - 280 VAC per phase
Maximum AC Input Current		30 A	40 A	60 A	25 A
<b>PV INPUT (DC)</b>					
Maximum DC Voltage	350 VDC	500 VDC	580 VDC	100 VDC	900 VDC
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC	280 VDC ~ 500 VDC	100 VDC ~ 680 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum	1 / 1 x 15 A	1 / 1 x 18 A	1 / 1 x 18 A	2 / 2 x 15 A	2 / 2 x 18.6 A
<b>BATTERY MODE OUTPUT (AC)</b>					
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240	202/208/220/230/240 VAC	202/208/220/230/240	230 VAC(P-N) / 400 VAC(P-P)
Output Waveform			Pure Sinewave		
Efficiency (DC to AC)	90%	93%	91%	91%	91%
<b>HYBRID OPERATION</b>					
<b>PV INPUT (DC)</b>					
Nominal DC Voltage / Maximum DC	300 VDC / 350 VDC	360 VDC / 500 VDC	360 VDC / 580 VDC	360 VDC / 680 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding	80 VDC / 120 VDC	116 VDC / 150 VDC	116 VDC / 150 VDC	116 VDC / 150 VDC	320 VDC / 350 VDC
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC	280 VDC ~ 500 VDC	100 VDC ~ 680 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum	1 / 1 x 15 A	1 / 1 x 18 A	1 / 1 x 18 A	2 / 2 x 15 A	2 / 2 x 18.6 A
<b>GRID OUTPUT (AC)</b>					
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC	202/208/220/230/240 VAC	202/208/220/230/240 VAC	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	88-127 VAC*		184-264.5 VAC*		184 - 264.5 VAC* per
Nominal Output Current	18 A	13 A	17.5 A	21 A	14.5 A per phase
<b>AC INPUT</b>					
AC Start-up Voltage / Auto Restart	60 - 70 VAC / 85 VAC	120 - 140 VAC / 180 VAC	120 - 140 VAC /180 VAC	120 - 140 VAC /180 VAC	120 - 140 VAC per
Acceptable Input Voltage Range	80 - 130 VAC	170 - 280 VAC	170 - 280 VAC	170 - 280 VAC	170 - 280 VAC per phase
Maximum AC Input Current		30 A	40 A	60 A	25 A
<b>BATTERY MODE OUTPUT (AC)</b>					
Nominal Output Voltage	101/110/120/127 VAC	202/208/220/230/240 VAC	202/208/220/230/240 VAC	202/208/220/230/240 VAC	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (DC to AC)	90%	93%	91%	91%	91%
<b>BATTERY &amp; CHARGER</b>					
Nominal DC Voltage			48 VDC		
Maximum Charging Current		Default 25A, 5A - 25A (Adjustable)	Default 60A, 5A - 80A (Adjustable)	Default 60A, 5A -100A (Adjustable)	Default 60A, 10A -200A (Adjustable)
<b>GENERAL</b>					
<b>PHYSICAL</b>					
Dimension, D X W X H (mm)		115 x 438 x 480	117 x 438 x 535	135 x 440 x 505	167.5 x 500 x 622
Net Weight (kgs)		15.5	16.2	18.5	45
<b>INTERFACE</b>					
Communication Port		RS-232/USB	USB/Dry contact	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			0 to 40°C		
Altitude			0 ~ 1000 m**		
<b>Warranty (against any manufacturing defects.)</b>					
Years			1		

\*Specifications are subject to change without prior notice

# Get Future Ready.

For further details :-

Write to [enquiry@novergy.net](mailto:enquiry@novergy.net) | [info@novergy.co.in](mailto:info@novergy.co.in)

Visit us at [novergy.co.in](http://novergy.co.in)