

## Energid V III Series | 2KW-5KW



Pure Sine Wave Output



Output Power Factor 1.0



USB On-The-Go



BMS Communication



LiFePO4 Compatible



Mobile App



User Friendly LCD



Programmable Operation Modes



Parallel Operation (9 units)



## Key Features

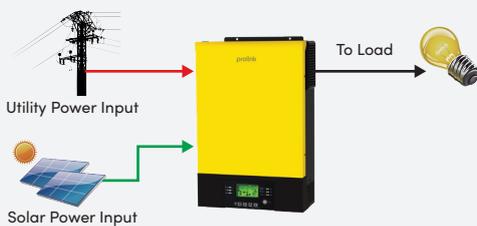
### Battery independent design

Operates efficiently without relying on an attached battery storage system.

#### With battery connected



#### Without battery connected



### Built-in BMS communication for LiFePO4 battery

Provides advanced monitoring and management to lithium-ion battery.

### Flexible Scalability with Parallel Configuration

Expandable solar power system with up to 9 units in parallel for capacity extension.

### Data logs store in the inverter

All the events including warning/fault conditions of the inverter can be stored for future analysis.

### Selectable high-power charging current

Safe, efficient and fast charging of battery bank even with higher total capacity.

### Self-consumption and feed-in to grid

Produced electricity from PV panels is directly consumed in the home and excess power can also be fed into the grid.

### Programmable multiple operation modes

Select between Grid-tie (with battery backup), Grid-tie and Off-grid to suite application and scenarios.

## Specifications

MODEL	Energrid V III 2KM-48	Energrid V III 3KM-48	Energrid V III 5KM-48
Phase	1-phase in / 1-phase out		
Maximum PV Input Power	3000W	4500W	6000W
Rated Output Power	2000W	3000W	5000W
Maximum Charging Power	3000W	3000W	5000W
<b>GRID-TIE OPERATION</b>			
<b>PV INPUT (DC)</b>			
Nominal DC Voltage / Maximum DC Voltage	240 VDC / 500 VDC	360 VDC / 500 VDC	360 VDC / 450 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150 VDC	120VDC / 150 VDC	120VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 13 A	1 / 13A	1 / 27A
<b>GRID OUTPUT (AC)</b>			
Nominal Output Voltage	220/230/240 VAC		
Output Voltage Range	184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)		
Nominal Output Current	8.7A	13A	21.7A
Power Factor	> 0.99		
<b>EFFICIENCY</b>			
Maximum Conversion Efficiency (DC/AC)	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	90 - 280 VAC or 170 - 280 VAC		
Frequency Range	50 Hz/60 Hz (Auto sensing)		
Maximum AC Input Current	30 A	40 A	40 A
<b>PV INPUT (DC)</b>			
Maximum DC Voltage	500 VDC	500 VDC	450 VDC
MPP Voltage Range	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 13 A	1 / 13A	1 / 27A
<b>BATTERY MODE OUTPUT (AC)</b>			
Nominal Output Voltage	220/230/240 VAC		
Output Waveform	Pure sine wave		
Efficiency (DC to AC)	93%	93%	93%
<b>HYBRID OPERATION</b>			
<b>PV INPUT (DC)</b>			
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC	360 VDC / 500 VDC	360 VDC / 450 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150 VDC	120VDC / 150 VDC	120VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
Number of MPP Trackers / Maximum Input Current	1 / 13 A	1 / 13A	1 / 27A
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Nominal Output Current	8.7A	13A	21.7A
<b>AC INPUT</b>			
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	30 A	40 A	40 A
<b>BATTERY MODE OUTPUT (AC)</b>			
Nominal Output Voltage	220/230/240 VAC		
Efficiency (DC to AC)	93%	93%	93%
<b>BATTERY &amp; CHARGER</b>			
Nominal DC Voltage	48 VDC		
Maximum Solar Charging Current	60 A	60 A	100 A
Maximum AC Charging Current	60 A	60 A	100 A
Maximum Charging Current	60 A	60 A	100 A
<b>GENERAL</b>			
<b>PHYSICAL</b>			
Dimension, D x W x H (mm)	140 x 295 x 468		
Net Weight (kgs)	11	11	12
<b>INTERACE</b>			
Parallel Function	Yes, 9 units		
Communication Port	USB, RS-232, Dry Contact and WiFi		
<b>ENVIRONMENT</b>			
Humidity	0 ~ 90% RH (No condensing)		
Operating Temperature	-10°C to 50°C		

Product specifications are subject to change without further notice.