



## Energrid VTX (3P/3P) | 20KW-30KW



Pure Sine Wave Output



Output Power Factor 1.0



Built-in Output Isolation Transformer



High Durability



User Friendly LCD



Programmable Operation Modes



Parallel Operation (4 units, 30KW model)



Independent Dual Input



## Key Features

### Built-in isolation transformer

Enables electrical isolation between inverter and load and protection against electric shock, to suppress electrical noise in sensitive devices

### Higher PV power input

Accepts higher PV power input to provide sufficient power to load and battery charging.

### Dual inputs

Designed to allow two independent AC power source and switch automatically to prevent power interruptions.

### Flexible Scalability with Parallel Configuration

Expandable solar power system for 30KW model with up to 4 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.

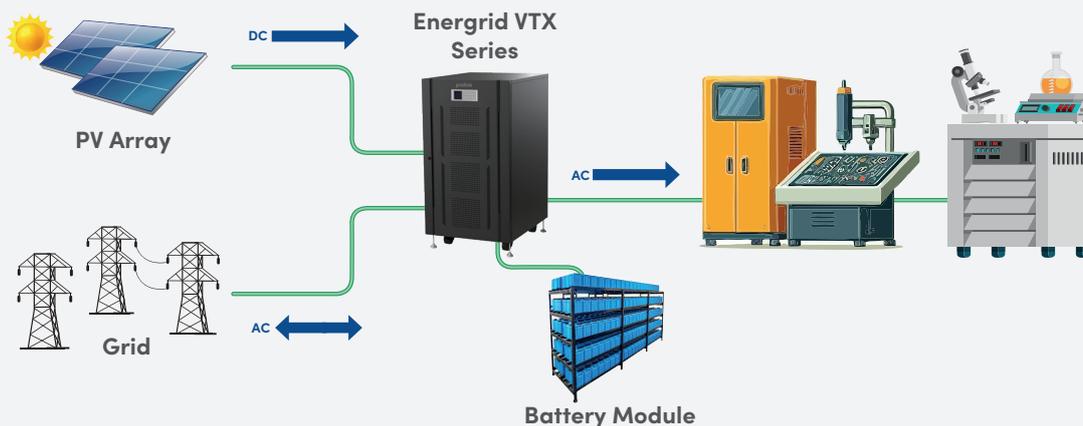
### Self-consumption and feed-in to grid

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.

## System Diagram



## Specifications

MODEL	Energid VTX 20KM-384	Energid VTX 30KM-384
Maximum PV Input Power	30KW	45KW
Rated Output Power	20KW	30KW
Maximum Charging Power	20KW	30KW
<b>GRID-TIE OPERATION</b>		
<b>PV INPUT (DC)</b>		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 950 VDC	
Start-up Voltage / Initial Feeding Voltage	500 VDC / 550 VDC	
MPP Voltage Range	460 VDC~900VDC	460 VDC~900VDC
Full power MPP Voltage Range	625 VDC ~ 900 VDC	
Number of MPP Trackers / Maximum Input Current	1 / 48A	1 / 72A
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	195~253 VAC per phase	
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz	
Nominal Output Current	29 A per phase	43.5 A per phase
Power Factor	1	
<b>EFFICIENCY</b>		
Maximum Conversion Efficiency (DC/AC)	93%	95%
<b>OFF-GRID OPERATION</b>		
<b>AC INPUT</b>		
AC Start-up Voltage/Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase for 20KW model 150 - 170 VAC per phase / 180 VAC per phase for 30KW model	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	40 A per phase	43.5 A per phase
<b>PV INPUT (DC)</b>		
Maximum DC Voltage / Maximum DC Voltage	30KW / 950 VDC	45KW / 950 VDC
MPP Voltage Range	550 VDC~900VDC	460 VDC~900VDC
Number of MPP Trackers / Maximum Input Current	1 / 48 A	1 / 72 A
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Waveform	Pure Sinewave	
Efficiency (DC to AC)	>91%	
<b>HYBRID OPERATION</b>		
<b>PV INPUT (DC)</b>		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 950 VDC	
Start-up Voltage / Initial Feeding Voltage	500 VDC / 550 VDC	
MPP Voltage Range	550 VDC~900VDC	460 VDC~900VDC
Number of MPP Trackers / Maximum Input Current	1 / 48 A	1 / 72 A
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC per phase for 20KW model 195 - 253 VAC per phase for 30KW model	
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz	
Nominal Output Current	29.0 A per phase	43.5 A per phase
Power Factor	1	
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase for 20KW model 150 - 170 VAC per phase / 180 VAC per phase for 30KW model	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	29.0 A per phase	43.5 A per phase
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Efficiency (DC to AC)	>91%	
<b>BATTERY &amp; CHARGER</b>		
Nominal DC Voltage	384 VDC	384VDC/384~480VDC
Maximum Charging Current	50A	80A
<b>GENERAL</b>		
<b>PHYSICAL</b>		
Dimension, D x W x H (mm)	559 x 320 x 909	430 x 715 x 1021
Net Weight (kgs)	120	223
<b>INTERFACE</b>		
Communication Port	RS-232/USB	
Intelligent Slot	Optional SNMP, GRPS, WIFI, Modbus cards available	
<b>ENVIRONMENT</b>		
Humidity	0 ~ 90% RH (Non-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.