

- Inverter/Charger
- Solar Charge Controller
- On-Grid Inverter
- On-Grid Inverter with Energy Storage
- Off-Grid Inverter
- Water Pump Inverter
- Inverter
- Solar Lighting Solution



In our world, everything is built to last.



**VOLTRONIC POWER TECHNOLOGY CORP.**

Taiwan: No. 406, Xinhu 1st Road, Neihu District, Taipei, Taiwan TEL: 886-2-27918296 FAX: 886-2-87918216

China: 1-4F, Building 5, YuSheng Industrial Park, No.467, Section Xixiang, National Highway 107,  
Xixiang, Bao An District, Shenzhen, China TEL: 86-755-86016601 FAX: 86-755-86016603

[www.voltronicpower.com](http://www.voltronicpower.com)

This guide is intended for reference purposes only. All product specifications are subject to change without notice. No part of this publication may be reproduced in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission of the publisher. All brand and product names are trademarks or registered trademarks of their respective companies.

© Voltronic Power Technology Corp. version, 2019 01

# Voltronic Power Overview

Voltronic Power Technology Corp. established by Alex Hsieh has over 20 years of experience in DMS (Design and Manufacturing Service) of power products. Headquartered in Taiwan, Voltronic Power is committed to providing high quality products and services to meet diverse customers' requirements. With the same diligent customer-oriented spirit, Voltronic Power is dedicated to continuously designing, manufacturing, marketing, and introducing a complete line of UPSs, inverters, and solar power products to the demanding power market.

To meet customers' demand, we have expanded our manufacturing factory to 3 for sufficient capacity of production. Our R&D center is co-located with manufacturing to offer efficient operation. We have solid and richly-experienced engineering teams dedicated to product development. Voltronic Power guarantees reliable product development and consistent manufacturing quality, from raw materials to finished products to punctually fulfill its delivery deadlines.

Voltronic Power is a truly remarkable company, with a strong history of service, innovation and growth. Voltronic Power's professional team is ready to start a new chapter in the global power market.

## ✿ Mission Statement & Corporate Vision



Production Line



SMD/AI



R&D

To become a worldwide leading DMS provider by developing both customized products and exclusive marketing intelligence for customers :

We focus 100% on creating customers' brands and dedicate ourselves to developing innovative power products and marketing intelligence for customers.

To develop a reputation in the power industry as a trusted and reliable partner :

We understand that "Good Products" are the core competence for company development. Therefore, we are dedicated to developing innovative and reliable products to customers through the continuous development and investment in our R&D center.

Build strong relationships with customers to strengthen customers' brands and market growth :

We help customers to develop their own brands and enlarge their market share because we strongly believe that customers are the key growth engine for Voltronic Power.

Continue developing the latest innovations, including eco-friendly and green products :

As global citizens, Voltronic Power is committed to reducing the environmental impact of our operations and products.

## ✿ Key Values to Customers

- **Secured Information Management:** With over 20 years of professional experience in the power market, we've managed power knowledge, market trends, and know-how with our customers. In the meanwhile, our customers' privacy has already been the most valued core for us to earn trusted relationships.
- **Innovative Design:** Leveraging 20 years of our professional experience in the power market, we've been highly aware of the market change and helped our customers attune to the dynamics of the industry. We've been dedicated to developing new technology and implementing innovative ideas in our products, but not always me-too outcome.
- **Quality Manufacturing:** Conforming with ISO-9001 and ISO-14001 certification, we have built up unmatched quality control systems from incoming components to finished products.
- **Satisfied Service:** We provide exclusive assistance and swift customer service, from product design and marketing packages to technical support.
- **Total Quality Assurance System:** From design, and manufacture, to service, we offer a Total Quality Assurance System to guarantee high-quality and reliable products and services. Our total quality system has been audited and approved by globally respected companies.

# Atom

- 600VA simulated sine wave inverter
- Built-in transformer
- Wide input voltage range
- 10A standard charging current
- Auto restart while AC is recovering
- Overload, overcharge and short circuit protection
- Cold start function
- Offer LED or LCD front panels for selection



# Lobo Inverter

- Simulated sine wave inverter
- Built-in AVR for voltage regulation
- Wide input voltage range: 90-280 VAC
- 12VDC or 24VDC available
- Overload, short circuit and reverse polarity protection
- LCD display for comprehensive information



INVERTER/CHARGER

## Inverter/Charger Selection Guide

MODEL	Atom 600		Lobo 1.2K	Lobo 2.4K
CAPACITY	600 VA / 420 W		1200VA/ 720W	2400VA/ 1440W
<b>INPUT</b>				
Voltage	230 VAC			
Acceptable Voltage Range	100 - 290 VAC	90-280VAC		
Frequency Range	50Hz/60Hz (Auto Sensing)			
<b>OUTPUT</b>				
AC Voltage Regulation (Batt. Mode)	230V ±10%			
Transfer Time	20 ms (typical)			
Waveform (Batt. Mode)	Simulated Sine wave			
<b>BATTERY</b>				
Battery Voltage	12 VDC	12 VDC	24VDC	
Floating Charge Voltage	13.7 VDC ± 2%	13.7 VDC ± 2%	27.4 VDC ± 2%	
Low Battery Alarm Voltage @ 50% Load	10.6 VDC ± 2%	10.2 VDC ± 2%	20.4 VDC ± 2%	
Shutdown Voltage	9.9 VDC ± 2%	9.9 VDC ± 2%	19.8 VDC ± 2%	
Overcharge Protection	14.5 VDC ± 2%	15.0 VDC ± 2%	30.0 VDC ± 2%	
Maximum Charge Current	10 A	10 A or 20 A (Selectable)		
<b>PHYSICAL</b>				
Dimension, D X W X H (mm)	359 x 97 x 147		300 x 360 x 88	
Net Weight (kgs)	5.1	6.1	7.4	
<b>ENVIRONMENT</b>				
Humidity	0 to 90% Relative Humidity (Non-condensing)			
Operating Temperature	0°C to 50°C		0°C to 40°C	
Storage Temperature	-15°C to 50°C		-15°C to 50°C	

Product specifications are subject to change without further notice.

## Genie Inverter

- Pure sine wave inverter
- Excellent microprocessor control guarantees high reliability
- Boost and buck AVR for voltage stabilization
- Selectable output transfer time for home appliances and personal computers
- Wide input voltage range
- Selectable charging current
- Overload, discharge and overcharge protection



## Axpert MS Inverter

- Pure sine wave inverter
- Selectable input voltage range for home appliances and personal computers
- Selectable charging current
- Auto restart while AC is recovering
- Overload and short circuit protection
- Generators & Computer-related devices compatible
- Smart battery charger design for optimized battery performance
- Cold start function



### Genie Sine Wave Inverter Selection Guide

MODEL	Genie 1K	Genie 2K
<b>CAPACITY</b>	1000VA/600W	2000VA/1200 W
<b>INPUT</b>		
Voltage	220VAC/230 VAC	
Acceptable Voltage Range	140-300VAC	
Frequency	50 Hz	
<b>OUTPUT</b>		
Output Voltage	220VAC/230 VAC	
Voltage Regulation (Batt. Mode)	± 10%	
Transfer Time	10 ms (For Personal Computer) 20 ms (for Home Appliances)	
Waveform (Batt. Mode)	Pure sine wave	
<b>BATTERY &amp; AC CHARGER</b>		
Battery Voltage	12 VDC	24 VDC
Floating Charge Voltage	13.7 VDC ±2%	27.4 VDC ±2%
Maximum Charge Current	10A or 20A (Selectable)	
<b>PROTECTION</b>		
Full Protection	Overload, discharge, and overcharge protection	
<b>PHYSICAL</b>		
Dimension, D X W X H (mm)	395 x 145 x 220	
Net Weight (kgs)	9.8	14.5
<b>ENVIRONMENT</b>		
Humidity	0 to 90% Relative Humidity (Non-condensing)	
Operating Temperature	0°C to 40°C	
Noise Level	Less than 50dB	

Product specifications are subject to change without further notice.

### Axpert MS Sine Wave Inverter Selection Guide

MODEL	Axpert MS 700	Axpert MS 1.2K
<b>CAPACITY</b>	700 VA / 500 W	1200 VA / 840 W
<b>INPUT</b>		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	
Frequency Range	50/60 Hz (Auto sensing)	
<b>OUTPUT</b>		
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	
Surge Power	1400 VA	2400 VA
Efficiency (Peak)	90%	
Transfer Time	10 ms (For Personal Computers) 20 ms (For Home Appliances)	
Waveform (Batt. Mode)	Pure sine wave	
<b>BATTERY &amp; AC CHARGER</b>		
Battery Voltage	12 VDC	
Floating Charge Voltage	13.5 VDC	
Low Battery Alarm Voltage	11.5 VDC	
Shutdown Voltage	10.5 VDC	
Overcharge Protection	15 VDC	
Maximum AC Charge Current	10 A or 15 A (Selectable)	10 A or 20 A (Selectable)
<b>PROTECTION</b>		
Full Protection	Overload and short circuit protection	
<b>PHYSICAL</b>		
Dimension, D X W X H (mm)	289 x 290 x 127	
Net Weight (kgs)	4.5	4.8
<b>ENVIRONMENT</b>		
Humidity	0 to 90% Relative Humidity (Non-condensing)	
Operating Temperature	0°C to 50°C	
Storage Temperature	-15°C to 70°C	

Product specifications are subject to change without further notice.

# +Nova Modular 3-in-1 Inverter/Rectifier/Solar Charger



- Modular scalable design up to 8 units
- Power factor 1
- 3-in-1: inverter, AC/DC charger or solar charger
- Hot-swappable design simplifies installation and maintenance
- Automatic load sharing on AC output
- High efficiency
- Overload and short circuit protection

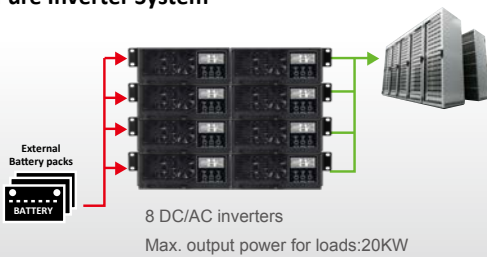
INVERTER/CHARGER

+Nova is a compact and scalable power module supporting up to 20KW power. The modules can be set as DC/AC inverter, AC/DC or DC/DC charger respectively, and consolidated to form a multifunctional operation system for diverse power requirement.

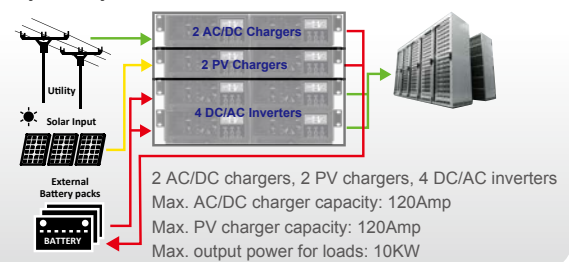
+Nova is designed with hot-swappable inverter/charger module which ensures low MTTR, reduction in service cost and meets future expansion demands.

## Multiple Applications:

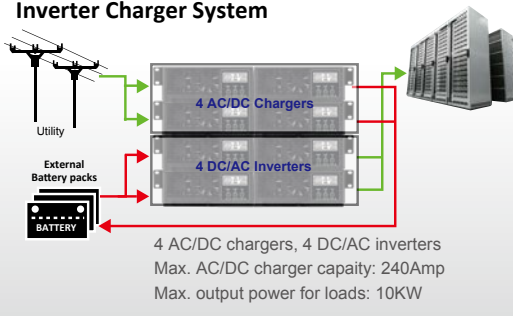
### Pure Inverter System



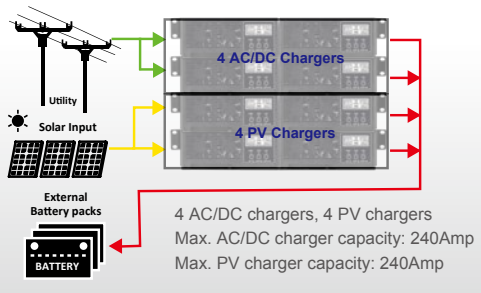
### Hybrid System



### Inverter Charger System



### Super Charger System





## +Nova Modular Inverter/Rectifier/Solar Charger Specification

MODEL	+Nova
CAPACITY	2500VA/2500W
<b>SET AS DC/AC INVERTER</b>	
<b>DC INPUT</b>	
Nominal DC Voltage	48VDC
Operating Voltage Range	40VDC ~ 60VDC
Voltage Ripple	≤ 2.0mV
Peak to Peak Noise	150mV up to 100MHz
Inrush Current	< 2 x Irated
<b>AC OUTPUT</b>	
Nominal Voltage	220/230/240 VAC (selectable)
AC Voltage Regulation	± 2% (max.)
Frequency Range	50Hz ± 0.1Hz
Peak Efficiency	> 93%
Harmonic Distortion	< 3% THD (Linear Load) < 5% THD (Non-linear Load)
Overload Capability	> 150% for 5 secs, >110% for 10 secs
Load Sharing	<5% at 50-100% load
<b>SET AS AC/DC CHARGER</b>	
<b>AC INPUT</b>	
Nominal Voltage	230 VAC
Operating Voltage Range	185 VAC ~ 265 VAC
Frequency Range	50Hz/60Hz (Auto sensing)
<b>DC OUTPUT</b>	
Nominal Voltage	54 VDC
Max. Charging Current	60A
Charging Method	3-step algorithm
<b>SET AS DC/DC (PV) CHARGER</b>	
<b>PV INPUT</b>	
Maximum Open Circuit Voltage	400VDC
MPPT Voltage Range	200VDC ~ 370VDC
Maximum Charging Current	60A
<b>DC OUTPUT</b>	
Nominal Voltage	54 VDC
Max. Charging Current	60A
Charging Method	3-step algorithm
<b>GENERAL</b>	
<b>PHYSICAL</b>	
Dimension, D X W X H (mm)	409 x 215 x 88
Net Weight (kgs)	6
<b>ENVIRONMENT</b>	
Humidity	5% ~ 95% RH (Non-Condensing)
Operating Temperature	-20°C to 60°C
Safety	IEC60950
Noise Level	Less than 50dB @ 1 Meter

Product specifications are subject to change without further notice.

# EPS (Emergency Power System) 5KW



- Pure sine wave inverter
- Built-in AC charger up to 60A
- Selectable charging current based on applications
- Configurable parameter setting via LCD display
- Compatible to mains voltage or generator power
- Auto restart while AC is recovering
- Overload and short circuit protection
- Smart battery charger design for optimized battery performance
- Selectable input voltage range for home appliances and personal computers
- Cold start function
- Parallel operation with up to 9 units
- Optional MPPT or PWM Solar Charger

## EPS 5KW Specification

MODEL	EPS 5KW
Rated Power	5000VA/5000W
<b>INPUT</b>	
Voltage	220/230/240 VAC
Voltage Range	170-255 VAC
Frequency Range	50 Hz/60 Hz (Auto sensing)
<b>OUTPUT</b>	
AC Voltage Regulation (Batt. Mode)	220/230/240VAC $\pm$ 5%
Surge Power for 5 seconds	10000VA
Efficiency (Peak)	93%
Transfer Time	< 10 ms
Waveform (Batt. Mode)	Pure sine wave
<b>BATTERY</b>	
Battery Voltage	48 VDC
CC/CV Charge Voltage	56.4 VDC
Floating Charge Voltage	53.6 VDC
Overcharge Protection	60 VDC
<b>AC CHARGER</b>	
Maximum AC Charge Current (Adjustable)	2.5~60 A
Charging modes	3 steps for CC, CF and Floating
<b>SOLAR CHARGER (option)</b>	
Maximum PV Array Power	4000W
MPPT Range @ Operating Voltage	60 VDC ~ 115 VDC
Maximum PV Array Open Circuit Voltage	145 VDC
Maximum Solar Charge Current	80 A
<b>PARALLEL</b>	
Maximum Parallel units	Up to 9 units
Parallel Type	Single Phase or Three Phase
Transfer Time in Parallel Mode	<40ms
<b>PHYSICAL</b>	
Dimension, D x W x H (mm)	400 x 438 x 88 (2U)
Net Weight (kgs)	9.1
<b>INTERFACE</b>	
Communication	Modbus RS-485
Dry Contact	Deliver signal to external device such as generator
<b>OPERATING ENVIRONMENT</b>	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	0°C to 40°C
Storage Temperature	-15°C to 60°C

Product specifications are subject to change without further notice.

# PWM Solar Charge Controller



- 12VDC or 24VDC available
- Multi-stage charging method
- Lightweight design

## PWM Solar Charge Controller Selection Guide

MODEL	SCC-PWM-120W	SCC-PWM-240W	SCC-PWM-360W	SCC-PWM-600W	SCC-PWM-720W	SCC-PWM-1200W
<b>INPUT</b>						
Maximum PV Array Open Circuit Voltage	25 VDC	50 VDC	75 VDC	75 VDC	75 VDC	75 VDC
Maximum PV Array Power	120 W	240 W	360 W	600 W	720 W	1200 W
Maximum Current	10 A		30 A	50 A	30 A	50 A
<b>OUTPUT</b>						
Nominal Battery Voltage	12 VDC	24 VDC	12 VDC	12 VDC	24 VDC	24 VDC
Connected Battery Type	Sealed lead acid battery					
Maximum Charging Current	10 A		30 A	50 A	30 A	50 A
Ripple Voltage	<math>\pm 1\text{ V}</math>					
Charging Method	Two stages: bulk and floating 1 / floating 2		Three stages: bulk, abs cv, floating			
<b>INDICATORS</b>						
LED Display	Green LED indicating charging status					
<b>PHYSICAL</b>						
Dimension, D X W X H (mm)	92.6 x 60.7 x 30.8		107.6 x 75 x 30.8	131 x 85 x 40.5	107.6 x 75 x 30.8	131 x 85 x 40.5
Net Weight	210 g		340 g	490 g	340 g	490 g
Connector	PV/Battery terminal block		PV/Battery/Load terminal block			
IP Protection	IP 31					
<b>ENVIRONMENT</b>						
Operating Temperature	-20°C to 55°C					
Storage Temperature	-40°C to 75°C					
Altitude	0 ~ 3000 m					

Product specifications are subject to change without further notice.

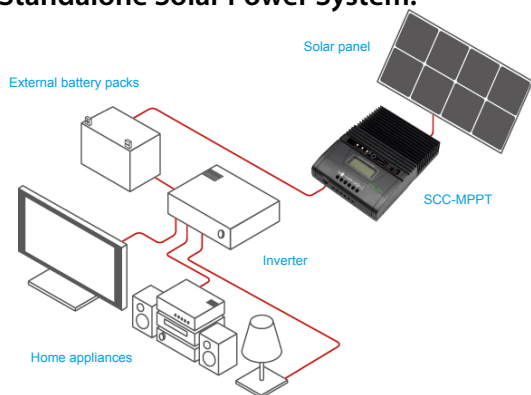


# MPPT Solar Charge Controller



- Intelligent Maximum Power Point Tracking technology
- Built-in DSP controller with high performance
- Automatic battery voltage detection (Only for 600W and 3KW)
- Battery temperature sensor (BTS) automatically provides temperature compensation (Only for 3KW)
- Three-stage charging optimizes battery performance
- Automatic load-detection
- Multifunctional LCD displays detailed information
- Reverse polarity protection for solar panel and battery
- Overcharge and overload protection
- Suitable for different battery types

## Standalone Solar Power System:



Combined MPPT technology and DSP controller, SCC-MPPT will convert best voltage to charge battery based on various temperature. Compared to traditional solar charge controllers, it allows your solar panels to operate at their optimum power output voltage, providing higher efficiency up to 98% with lower power loss.

Integrated SCC-MPPT with inverter, solar panel, and external battery packs, it can become a standalone solar power system to generate green power for your home appliances. SCC-MPPT will convert solar power to charge external batteries and then provide power to home appliances via inverter.

## MPPT Solar Charge Controller Selection Guide

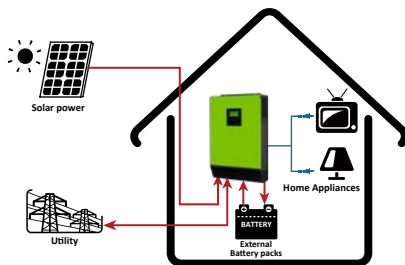
MODEL	SCC-MPPT 300W	SCC-MPPT 600W	SCC-MPPT 850W	SCC-MPPT 3KW
<b>INPUT</b>				
MPPT Range @ Operating Voltage	15 VDC ~ 37 VDC	15 VDC ~ 33 VDC	30 VDC ~ 66 VDC	45 VDC ~ 88 VDC
Maximum PV Array Open Circuit Voltage	50 VDC	50 VDC	75 VDC	98VDC
Maximum PV Array Power	300 W	300 W	600 W	850 W
Maximum Current		18 A		17A
				50 A
<b>OUTPUT</b>				
Nominal Battery Voltage	12 VDC	12 VDC	24 VDC	36 VDC
Connected Battery Type	Sealed lead acid, vented, Gel, NiCd battery			Sealed lead acid, AGM or Gel
Maximum Charging Current		25 A		20A
Maximum Efficiency	98%			
Charging Method	Three stages: bulk, absorption, and floating			
<b>PROTECTION</b>				
Overload Protection	> 110% : audible alarm			
Overcharge Protection	Yes			
Polarity Reversal Protection @ Solar Cell & Battery	Yes			
<b>INDICATORS</b>				
LCD Panel	LCD panel indicating solar power, load level, battery voltage/capacity, charging current, and fault conditions			
LED Display	Three indicators for solar, charging, and load status			
<b>PHYSICAL</b>				
Dimension, D x W x H (mm)	135 x 170 x 57.5	220 x 170 x 57.5		315 x 165 x 128
Net Weight (Kgs)	0.92	1.85		4.5
IP Protection	IP 43			IP 31
<b>ENVIRONMENT</b>				
Humidity	0 ~ 100% RH (Non-condensing)			5 ~ 95% RH (Non-condensing)
Operating Temperature	-20°C to 55°C			0°C to 55°C
Storage Temperature	-40°C to 75°C			-15°C to 60°C
Altitude	0 ~ 3000 m			

Product specifications are subject to change without further notice.

# InfiniSolar V



- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- User-adjustable charging current and voltage
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Monitoring software for real-time status display and control
- Parallel operation up to 6 units only for 3K/4K/5K models



## InfiniSolar V On-Grid Inverter With Energy Storage Selection Guide

MODEL	InfiniSolar V-1K-12	InfiniSolar V-2K-24	InfiniSolar V-3K-48	InfiniSolar V-4K-48	InfiniSolar V-5K-48
Max. PV Array Power	1000W	2000W	4000W	4000W	6000W
Rated Output Power	1000W	2000W	3000W	4000W	5000W
Maximum PV Array Open Circuit Voltage	145 VDC	145 VDC	145 VDC	145 VDC	145 VDC
MPPT Range @ Operating Voltage	15 VDC ~ 115 VDC	30 VDC ~ 115 VDC	60 VDC ~ 115 VDC	60 VDC ~ 115 VDC	60 VDC ~ 115 VDC
MPP Tracker Number	1	1	1	1	2
<b>GRID-TIE OPERATION</b>					
<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	4.3 A	8.7 A	13 A	17.4 A	21.7 A
Power Factor	> 0.99				
<b>EFFICIENCY</b>					
Maximum Conversion Efficiency (DC/AC)	90%				
<b>OFF-GRID, HYBRID OPERATION</b>					
<b>GRID INPUT</b>					
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC				
Frequency Range	50 Hz/60 Hz (Auto sensing)				
Maximum AC Input Current	30A		40A		
<b>BATTERY MODE OUTPUT (AC)</b>					
Nominal Output Voltage	220/230/240 VAC				
Output Waveform	Pure sine wave				
Efficiency (DC to AC)	93%				
<b>BATTERY &amp; CHARGER</b>					
Nominal DC Voltage	12 VDC	24 VDC	48 VDC	48 VDC	48 VDC
Maximum Solar Charge Current	80 A	80 A	80 A	80 A	120 A
Maximum AC Charge Current	60 A				
Maximum Charge Current	140 A	140 A	140 A	140 A	180 A
<b>GENERAL</b>					
<b>PHYSICAL</b>					
Dimension, D x W x H (mm)	100 x 300 x 440	100 x 300 x 440	120 x 295 x 468	120 x 295 x 468	190 x 295 x 483
Net Weight (kgs)	8	8	11	11	16
<b>INTERFACE</b>					
Parallel Function	N/A	N/A	Yes	Yes	Yes
External Safety Box (Optional)	Yes				
Communication Ports	USB or RS232/Dry-Contact				
<b>ENVIRONMENT</b>					
Humidity	0 ~ 90% RH (Non-condensing)				
Operating Temperature	0 to 50°C				

Product specifications are subject to change without further notice.

# InfiniSolar V II

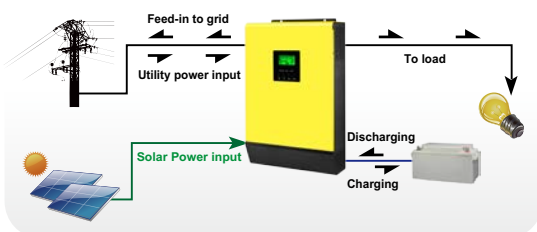
## Operation without battery



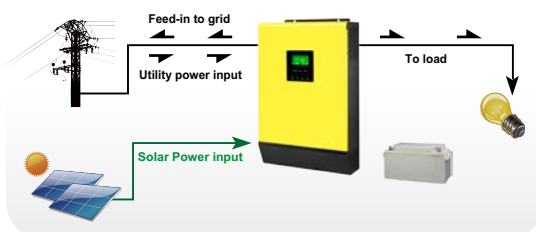
- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- User-adjustable charging current and voltage
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Monitoring software for real-time status display and control
- Parallel operation up to 9 units only for 3K model
- Battery Independent system

### Hybrid operation

• With battery connected



• Without battery connected



## InfiniSolar V II On-Grid Inverter With Energy Storage Selection Guide

MODEL	InfiniSolar V II 1.5KW	InfiniSolar V II 2KW	InfiniSolar V II 3KW
Max. PV Array Power	2000W	3000W	4000W
Rated Output Power	1500W	2000W	3000W
Maximum PV Array Open Circuit Voltage	400 VDC	450 VDC	450 VDC
MPPT Range @ Operating Voltage	120 VDC ~ 380 VDC	90 VDC ~ 430 VDC	120 VDC ~ 430 VDC
MPP Tracker Number	1	1	1
<b>GRID-TIE OPERATION</b>			
<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	6.5A	8.7A	13A
Power Factor	> 0.99		
<b>EFFICIENCY</b>			
Maximum Conversion Efficiency (DC/AC)	95%	95%	95%
<b>OFF-GRID, HYBRID OPERATION</b>			
<b>GRID INPUT</b>			
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC		
Frequency Range	50 Hz/60 Hz (Auto sensing)		
Maximum AC Input Current	30A	30A	40A
<b>BATTERY MODE OUTPUT (AC)</b>			
Nominal Output Voltage	220/230/240 VAC		
Output Waveform	Pure sine wave		
Efficiency (DC to AC)	93%		
<b>BATTERY &amp; CHARGER</b>			
Nominal DC Voltage	48 VDC		
Maximum Solar Charge Current	30 A	60 A	60 A
Maximum AC Charge Current	40 A	60 A	60 A
Maximum Charge Current	40 A	60 A	60 A
<b>GENERAL</b>			
<b>PHYSICAL</b>			
Dimension, D x W x H (mm)	100 x 300 x 440	120 x 295 x 468	120 x 295 x 468
Net Weight (kgs)	8	11	11
<b>INTERFACE</b>			
Parallel Function	N/A	Yes, 9 units	Yes, 9 units
Communication Ports	USB, RS-232 and dry contact		
<b>ENVIRONMENT</b>			
Humidity	0 ~ 90% RH (Non-condensing)		
Operating Temperature	0 to 50°C		

Product specifications are subject to change without further notice.

# InfiniSolar V II 3P/3P



- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- User-adjustable charging current and voltage
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Monitoring software for real-time status display and control
- 3 MPPT Inputs up to 180A solar charging current at 48Vdc battery voltage
- Battery Independent system

## InfiniSolar V II 3-phase in/3-phase out On-Grid Inverter With Energy Storage Selection Guide

MODEL	InfiniSolar V II 3P-6KW Tower	InfiniSolar V II 3P-9KW Tower
<b>PHASE</b>	3-phase in / 3-phase out	
Max. PV Array Power	9000W	12000W
Rated Output Power	6000W	9000W
Maximum PV Array Open Circuit Voltage	450 VDC	450 VDC
MPPT Range @ Operating Voltage	120 VDC ~ 430 VDC	120 VDC ~ 430 VDC
MPP Tracker Number	3	3
<b>GRID-TIE OPERATION</b>		
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240 VAC (P-N) / 380/400/415 VAC (P-P)	
Output Voltage Range	195.5 - 253 VAC per phase @ India Regulation 184 - 264.5 VAC per phase @ German Regulation	
Nominal Output Current	8.7 A per phase	13 A per phase
Power Factor	> 0.99	
<b>EFFICIENCY</b>		
Maximum Conversion Efficiency (DC/AC)	95%	95%
<b>OFF-GRID, HYBRID OPERATION</b>		
<b>GRID INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC per phase	
Acceptable Input Voltage Range	90 - 280 VAC or 170 - 280 VAC per phase	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
Maximum AC Input Current	20 A per phase	30 A per phase
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240 VAC per phase	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	93%	
<b>BATTERY &amp; CHARGER</b>		
Nominal DC Voltage	48 VDC	
Maximum Solar Charge Current	180 A	
Maximum AC Charge Current	180 A	
Maximum Charge Current	180 A	
<b>GENERAL</b>		
<b>PHYSICAL</b>		
Dimension, D x W x H (mm)	588 x 260 x 655	
Net Weight (kgs)	36	37.5
<b>INTERFACE</b>		
Communication Ports	USB, RS-232 and dry contact	
<b>ENVIRONMENT</b>		
Humidity	0 ~ 90% RH (Non-condensing)	
Operating Temperature	0 to 50°C	

Product specifications are subject to change without further notice.

# InfiniSolar: On-Grid Inverter with Energy Storage

## Innovative and Cost-effective Power Solution



- 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 batteries
- 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
- Custom-made firmware by ODM contract
- Parallel operation up to 6 units for 5KW and 10KW

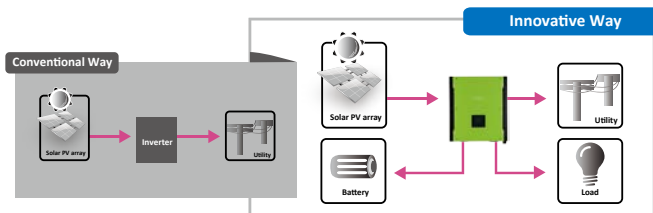
ON-GRID INVERTER WITH ENERGY STORAGE

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 a battery for night-time usage or use for self-consumption first depending on demands. Priority for power source is programmable through smart software. During night time or power failure, it will automatically consume reserved power from the battery. In this way, it will reduce dependence on the utility.



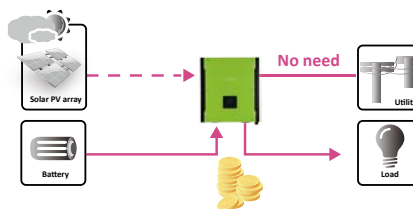
### Feed-in is not the only choice

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



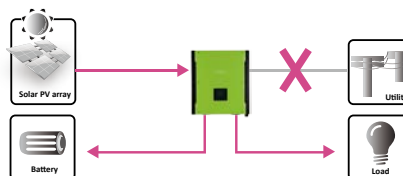
### Save money by discharging battery for self-consumption first

InfiniSolar can save money by using battery energy first when PV energy is low. Until battery energy is low, InfiniSolar will consume 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 a perfect power solution for remote regions or temporary AC power source for camping or night market.



## InfiniSolar On-grid Inverter with Energy Storage Selection Guide

MODEL	InfiniSolar 2KW	InfiniSolar Plus 3KW	InfiniSolar Pro 3KW	InfiniSolar Plus 5KW	InfiniSolar 3P 10KW
<b>PHASE</b>	1-phase in / 1-phase out				3-phase in / 3-phase out
<b>MAXIMUM PV INPUT POWER</b>	2250 W	4500 W	4500 W	10000 W	14850 W
<b>RATED OUTPUT POWER</b>	2000 W	3000 W	3000 W	5000 W	10000 W
<b>MAXIMUM CHARGING POWER</b>	1200 W		1200 W	4800 W	9600 W
<b>GRID-TIE OPERATION</b>					
<b>PV INPUT (DC)</b>					
Nominal DC Voltage / Maximum DC Voltage	300 VDC / 350 VDC	360 VDC / 500 VDC	360 VDC / 500 VDC	720 VDC / 900 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	80 VDC / 120 VDC	116 VDC / 150 VDC	116 VDC / 150 VDC	225 VDC / 250 VDC	320 VDC / 350 VDC
MPP Voltage Range	120 VDC ~ 320 VDC	250 VDC ~ 450 VDC	250 VDC ~ 450 VDC	250 VDC ~ 850 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	1 / 1 x 15 A	1 / 1 x 18 A	1 / 1 x 18 A	2 / 2 x 10 A	2 / 2 x 18.6A
<b>GRID OUTPUT (AC)</b>					
Nominal Output Voltage	101/110/120/127 VAC	208/220/230/240 VAC			230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	88 - 127 VAC*	184 - 265 VAC*			184 - 265 VAC* per phase
Nominal Output Current	18 A	13 A	13 A	21 A	14.5A per phase
Power Factor	> 0.99				
<b>EFFICIENCY</b>					
Maximum Conversion Efficiency (DC/AC)	95%	96%			
European Efficiency@ Vnominal	94%	95%			
<b>OFF-GRID OPERATION</b>					
<b>AC INPUT</b>					
AC Start-up Voltage/Auto Restart Voltage	60 - 70 VAC / 85 VAC	120 - 140 VAC / 180 VAC			120 - 140 VAC per phase / 180 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	
<b>PV INPUT (DC)</b>					
Maximum DC Voltage	350 VDC	500 VDC	500 VDC	900 VDC	900 VDC
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC	250 VDC ~ 450 VDC	250 VDC ~ 850 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers/Maximum Input Current	1 / 1 x 15 A	1 / 1 x 18 A	1 / 1 x 18 A	2 / 2 x 10A	2 / 2 x 18.6A
<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)
Output Waveform	Pure Sinewave				
Efficiency (DC to AC)	90%	93%			91%
<b>HYBRID OPERATION</b>					
<b>PV INPUT (DC)</b>					
Nominal DC Voltage / Maximum DC Voltage	300 VDC / 350 VDC	360 VDC / 500 VDC	360 VDC / 500 VDC	720 VDC / 900 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	80 VDC / 120 VDC	116 VDC / 150 VDC	116 VDC / 150 VDC	225 VDC / 250 VDC	320 VDC / 350 VDC
MPP Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC	250 VDC ~ 450 VDC	250 VDC ~ 850 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers/Maximum Input Current	1 / 1 x 15 A	1 / 1 x 18 A	1 / 1 x 18 A	2 / 2 x 10A	2 / 2 x 18.6A
<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 phase
Nominal Output Current	18 A	13 A	13 A	21 A	14.5 A per phase
<b>AC INPUT</b>					
AC Start-up Voltage / Auto Restart Voltage	60 - 70 VAC / 85 VAC	120 - 140 VAC / 180 VAC			120 - 140 VAC per phase / 180 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	
<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%
<b>BATTERY &amp; CHARGER</b>					
Nominal DC Voltage	48 VDC				
Maximum Charging Current	Default 25A, 5A - 25A (Adjustable)		Default 25 A, 5A - 60A (Adjustable)	Default 60A, 5A - 100A (Adjustable)	Default 60A, 10A - 200A (Adjustable)
<b>GENERAL</b>					
<b>PHYSICAL</b>					
Dimension, D x W x H (mm)	107 x 438 x 480			204.2 x 460 x 600	167.5 x 500 x 622
Net Weight (kgs)	15.5			29	45
<b>INTERFACE</b>					
Communication Port	RS-232/USB			RS-232/USB	
Intelligent Slot	Optional SNMP, Modbus and AS-400 cards available				
<b>ENVIRONMENT</b>					
Humidity	0 ~ 90% RH (Non-Condensing)				
Operating Temperature	0 to 40°C			-10 to 55°C	
Altitude	0 ~ 1000 m**				

\*These 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.





# InfiniSolar Super 4KW



- 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 batteries
- 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
- 60A of AC & PV Charger capability
- Support Parallel up to 6 units
- PV input power is 50% higher of inverter rating to support more power for battery charging even with full load connected.

## InfiniSolar Super On-Grid Inverter with Energy Storage Specification

MODEL	InfiniSolar Super 4KW
Phase	1-phase in / 1-phase out
Maximum PV Input Power	5000 W
Rated Output Power	4000 W
Maximum Charging Power	4000 W
<b>GRID-TIE OPERATION</b>	
<b>PV INPUT (DC)</b>	
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 580 VDC
Start-up Voltage / Initial Feeding Voltage	116 VDC / 150 VDC
MPP Voltage Range	280 VDC ~ 500 VDC
Number of MPP Trackers / Maximum Input Current	1 / 1 x 18 A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	202/208/220/230/240 VAC
Output Voltage Range	184-264.5 VAC*
Nominal Output Current	17.5 A
Power Factor	> 0.99
<b>EFFICIENCY</b>	
Maximum Conversion Efficiency (DC/AC)	96%
European Efficiency@ Vnominal	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	170-280 VAC
Maximum AC Input Current	40 A
<b>PV INPUT (DC)</b>	
Maximum DC Voltage	580 VDC
MPP Voltage Range	280 VDC ~ 500 VDC
Number of MPP Trackers / Maximum Input Current	1 / 1 x 18 A
<b>BATTERY MODE OUTPUT (AC)</b>	
Nominal Output Voltage	202/208/220/230/240 VAC
Output Waveform	Pure sinewave
Efficiency (DC to AC)	91%
<b>HYBRID OPERATION</b>	
<b>PV INPUT (DC)</b>	
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 580 VDC
Start-up Voltage / Initial Feeding Voltage	116 VDC / 150 VDC
MPP Voltage Range	280 VDC ~ 500 VDC
Number of MPP Trackers / Maximum Input Current	1 / 1 x 18 A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	202/208/220/230/240 VAC
Output Voltage Range	184-264.5 VAC*
Nominal Output Current	17.5 A
<b>AC INPUT</b>	
AC Start-up Voltage / Auto Restart Voltage	120-140 VAC / 180 VAC
Acceptable Input Voltage Range	170-280 VAC
Maximum AC Input Current	40A
<b>BATTERY MODE OUTPUT (AC)</b>	
Nominal Output Voltage	202/208/220/230/240 VAC
Efficiency (DC to AC)	91%
<b>BATTERY &amp; CHARGER</b>	
Nominal DC Voltage	48 VDC
Maximum Charging Current	80 A
<b>GENERAL</b>	
<b>PHYSICAL</b>	
Dimension, D x W x H (mm)	117 x 438 x 535
Net Weight (kgs)	16.2
<b>INTERFACE</b>	
Communication Port	USB/Dry contact
Intelligent Slot	Optional SNMP, Modbus and AS-400 cards
<b>ENVIRONMENT</b>	
Humidity	0 ~ 90% RH (Non-condensing)
Operating Temperature	0 to 40°C
Altitude	0 ~ 1000 m**

\*These figures may vary depending on different AC voltage and country requirements.

\*\* Power derating 1% every 100m when altitude is over 1000m  
Product specifications are subject to change without further notice.

CE VDE-AR-N 4105  
VDE 0126-1-1

 **Voltronic Power**  
Advancing Power

# InfiniSolar E 5.5KW



- Pure sine wave output
- 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 batteries
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Built-in timer for various mode of on/off operation
- Built-in 2 strings of MPP trackers
- 60A of AC & PV charge capability
- Optional DC switch

## InfiniSolar E 5.5KW On-Grid Inverter with Energy Storage Specification

MODEL	InfiniSolar E 5.5KW
Maximum PV Input Power	6500W
Rated Output Power	5500W
Maximum Charging Power	2880 W
<b>GRID-TIE OPERATION</b>	
<b>PV INPUT (DC)</b>	
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	116 VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 450 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 13 A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	202/208/220/230/240 VAC
Output Voltage Range	184 - 264.5 VAC*
Max. Output Current	23.9A*
Power Factor	> 0.99
<b>EFFICIENCY</b>	
Maximum Conversion Efficiency (DC/AC)	96%
European Efficiency@ Vnominal	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	170 -280 VAC
Maximum AC Input Current	40 A
<b>PV INPUT (DC)</b>	
Maximum DC Voltage	500 VDC
MPP Voltage Range	120 VDC ~ 450 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 13 A
<b>BATTERY MODE OUTPUT (AC)</b>	
Nominal Output Voltage	202/208/220/230/240 VAC
Output Waveform	Pure sinewave
Efficiency (DC to AC)	93%
<b>HYBRID OPERATION</b>	
<b>PV INPUT (DC)</b>	
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 500 VDC
Start-up Voltage / Initial Feeding Voltage	116 VDC / 150 VDC
MPP Voltage Range	120 VDC ~ 450 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 13 A
<b>GRID INPUT</b>	
Nominal Output Voltage	202/208/220/230/240 VAC
Output Voltage Range	184 - 264.5 VAC*
Max. Output Current	23.9A*
<b>AC INPUT</b>	
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Input Voltage Range	170 -280 VAC
Maximum AC Input Current	40A
<b>BATTERY MODE OUTPUT (AC)</b>	
Nominal Output Voltage	202/208/220/230/240 VAC
Efficiency (DC to AC)	93%
<b>BATTERY &amp; CHARGER</b>	
Nominal DC Voltage	48 VDC
Maximum Solar Charge Current	60 A
<b>GENERAL</b>	
<b>PHYSICAL</b>	
Dimension, D x W x H (mm)	110 x 450 x 445
Net Weight (kgs)	16
<b>INTERFACE</b>	
External Safety Box (Optional)	RS-232/USB
Communication ports	Optional SNMP, Modbus and AS-400 cards
<b>ENVIRONMENT</b>	
Humidity	0 ~ 90% RH (Non-condensing)
Operating Temperature	0 to 40°C
Altitude	0 ~ 1000 m**

Product specifications are subject to change without further notice.

# InfiniSolar TX 3P/3P



- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- True galvanic isolation transformer design
- User-adjustable charging current
- Programmable multiple operation 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

ON-GRID INVERTER WITH ENERGY STORAGE

## InfiniSolar TX 3 Phase Transformer Type Hybrid Inverter Selection Guide

MODEL	InfiniSolar TX 6KW	InfiniSolar TX 10KW	InfiniSolar TX 20KW
<b>MAXIMUM PV INPUT POWER</b>	9KW	15KW	30KW
<b>RATED OUTPUT POWER</b>	6KW	10KW	20KW
<b>MAXIMUM CHARGING POWER</b>	6KW	10KW	20KW
<b>GRID-TIE OPERATION</b>			
<b>PV INPUT (DC)</b>			
Nominal DC Voltage / Maximum DC Voltage	500 VDC / 750 VDC		720 VDC / 950 VDC
Start-up Voltage / Initial Feeding Voltage	220 VDC / 250 VDC		500 VDC / 550 VDC
MPP Voltage Range	250 VDC ~ 700 VDC		550 VDC ~ 900 VDC
Full power MPP Voltage Range	450 VDC ~ 700 VDC		625 VDC ~ 900 VDC
Number of MPP Trackers / Maximum Input Current	1 / 20A	1 / 33A	1 / 48A
<b>GRID OUTPUT (AC)</b>			
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)		
Output Voltage Range	184 - 265 VAC per phase		
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz		
Nominal Output Current	8.7 A per phase	14.3 A per phase	14.5 A per phase
Power Factor	> 0.99		
<b>EFFICIENCY</b>			
Maximum Conversion Efficiency (DC/AC)	91%	91%	91%
<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		
Acceptable Input Voltage Range	170 - 280 VAC per phase		
Maximum AC Input Current	20 A per phase	30 A per phase	40 A per phase
<b>PV INPUT (DC)</b>			
Maximum DC Power / Maximum DC Voltage	9KW / 750 VDC	15KW / 750 VDC	30KW / 950 VDC
MPP Voltage Range	250 VDC ~ 700 VDC		550 VDC ~ 900 VDC
Number of MPP Trackers / Maximum Input Current	1 / 20 A	1 / 33 A	1 / 48 A
<b>BATTERY MODE OUTPUT (AC)</b>			
Nominal Output Voltage	230VAC* (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	500 VDC / 750 VDC		720 VDC / 950 VDC
Start-up Voltage / Initial Feeding Voltage	220 VDC / 250 VDC		500 VDC / 550 VDC
MPP Voltage Range	250 VDC ~ 700 VDC		550 VDC ~ 900 VDC
Number of MPP Trackers / Maximum Input Current	1 / 20 A	1 / 33 A	1 / 48 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		
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz		
Nominal Output Current	8.7 A per phase	14.3 A per phase	14.5 A per phase
Power Factor	> 0.99		
<b>AC INPUT</b>			
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase		
Acceptable Input Voltage Range	170 - 280 VAC per phase		
Maximum AC Input Current	8.7 A per phase	14.3 A per phase	40 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	192 VDC	192 VDC	384 VDC
Maximum Charging Current	32A	52A	50A
<b>GENERAL</b>			
<b>PHYSICAL</b>			
Dimension, D x W x H (mm)	815 x 300 x 830	559 x 320 x 909	559 x 320 x 909
Net Weight (kgs)	102	115	120
<b>INTERFACE</b>			
Communication Port	RS-232/USB		
Intelligent Slot	Optional SNMP, GPRS, WIFI, Modbus cards available		
<b>ENVIRONMENT</b>			
Humidity	0 ~ 90% RH (Non-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.  
 \*\* Power derating 1% every 100 m when altitude is over 1000m  
 Product specifications are subject to change without further notice.

# InfiniSolar TX-PA



- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- True galvanic isolation transformer design
- User-adjustable charging current
- Programmable multiple operation 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
- Parallel operation up to 4 units

## InfiniSolar TX-PA 3 Phase Transformer Type Hybrid Inverter Specification

MODEL	InfiniSolar TX-PA 30KW
<b>MAXIMUM PV INPUT POWER</b>	45KW
<b>RATED OUTPUT POWER</b>	30KW
<b>MAXIMUM CHARGING POWER</b>	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 ~ 900 VDC
Full power MPP Voltage Range	625 VDC ~ 900 VDC
Number of MPP Trackers / Maximum Input Current	1 / 72A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	230 VAC* (P-N) / 400 VAC (P-P)
Output Voltage Range	195.5 - 253 VAC per phase
Output Frequency Range	49 ~ 51 Hz or 59.3 ~ 60.5 Hz
Nominal Output Current	43.5 A per phase
Power Factor	1
<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	150 - 170 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase
Maximum AC Input Current	43.5 A per phase
<b>PV INPUT (DC)</b>	
Maximum DC Power / Maximum DC Voltage	45KW / 950 VDC
MPP Voltage Range	460 VDC ~ 900 VDC
Number of MPP Trackers / Maximum Input Current	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	460 VDC ~ 900 VDC
Number of MPP Trackers / Maximum Input Current	1 / 72 A
<b>GRID OUTPUT (AC)</b>	
Nominal Output Voltage	230 VAC* (P-N) / 400 VAC (P-P)
Output Voltage Range	195.5 - 253 VAC per phase
Output Frequency Range	49 ~ 51 Hz or 59.3 ~ 60.5 Hz
Nominal Output Current	43.5 A per phase
Power Factor	1
<b>AC INPUT</b>	
AC Start-up Voltage / Auto Restart Voltage	150 - 170 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase
Maximum AC Input Current	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 Battery Voltage/Charging Voltage Range	384 VDC / 384 VDC ~ 480 VDC
Maximum Charging Current	80A
<b>GENERAL</b>	
<b>PHYSICAL</b>	
Dimension, D x W x H (mm)	430 x 715 x 1021
Net Weight (kgs)	223
<b>INTERFACE</b>	
Communication Port	RS-232/USB
Intelligent Slot	Optional SNMP, GPRS, WIFI, Modbus cards available
<b>ENVIRONMENT</b>	
Humidity	0 ~ 90% RH (Non-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.

\*\* Power derating 1% every 100 m when altitude is over 1000m  
Product specifications are subject to change without further notice.

# Axpert V Value Off-Grid Inverter



- Pure sine wave solar inverter
- Selectable high power charging current
- Wide DC input range
- Selectable input voltage range for home appliances and personal computers
- Configurable AC/Solar input priority via LCD setting
- Compatible to AC mains or generator power
- Auto restart while AC is recovering
- Overload and short circuit protection
- Smart battery charger design for optimized battery performance
- Cold start function

## Axpert V Value Off-Grid Inverter Selection Guide

MODEL	Axpert VP3000-24	Axpert VM3000-24
Rated Power	3000VA / 2400W	
<b>INPUT</b>		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
<b>OUTPUT</b>		
AC Voltage Regulation (Batt. Mode)	230VAC $\pm$ 5%	
Surge Power	6000VA	
Efficiency (Peak)	90% ~ 93%	
Transfer Time	10 ms (For Personal Computers) 20 ms (For Home Appliances)	
Waveform	Pure sine wave	
<b>BATTERY</b>		
Battery Voltage	24 VDC	
Floating Charge Voltage	27 VDC	
Overcharge Protection	32 VDC	
<b>SOLAR CHARGER &amp; AC CHARGER</b>		
Solar Charger type	PWM	MPPT
Maximum PV Array Open Circuit Voltage	80 VDC	102 VDC
Maximum PV Array Power	1200 W	1000 W
MPP Range @ Operating Voltage	N/A	30~80 VDC
Maximum Solar Charge Current	50 A	40 A
Maximum AC Charge Current	25 A	25 A
Maximum Charge Current	70 A	60 A
<b>PHYSICAL</b>		
Dimension, D x W x H (mm)	88 x 225 x 320	
Net Weight (kgs)	6.0	6.0
Communication Interface	USB/RS232	
<b>OPERATING ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	-10°C - 55°C	
Storage Temperature	-15°C - 60°C	

Product specifications are subject to change without further notice

# Axpert V Off-Grid Inverter

OFF-GRID INVERTER



Axpert VM 1000-12 / Axpert VM 2000-24    Axpert VP 1000-12 / Axpert VP 2000-24    Axpert VP3000-24 / Axpert VM3000-24    Axpert VM 3000-24 Plus / Axpert VP 5000-48 / Axpert VM 5000-48

- Pure sine wave solar inverter
- Output power factor 1
- Selectable high power charging current
- Wide DC input range
- Selectable input voltage range for home appliances and personal computers
- Configurable AC/Solar input priority via LCD setting
- Compatible to AC mains or generator power
- Auto restart while AC is recovering
- Overload and short circuit protection
- Smart battery charger design for optimized battery performance
- Cold start function
- Optional anti-dusk kit

## Axpert V Off-Grid Inverter Selection Guide

MODEL	Axpert VP 1000-12	Axpert VM 1000-12	Axpert VP 2000-24	Axpert VM 2000-24	Axpert VP 3000-24	Axpert VM 3000-24	Axpert VM 3000-24 Plus	Axpert VP 5000-48	Axpert VM 5000-48
Rated Power	1000VA/1000W		2000VA/2000W		3000VA / 3000W			5000VA / 5000W	
<b>INPUT</b>									
Voltage	230 VAC								
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)								
Frequency Range	50 Hz/60 Hz (Auto sensing)								
<b>OUTPUT</b>									
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%								
Surge Power	2000VA		4000VA		6000VA			10000VA	
Efficiency (Peak)	90% ~ 93%								
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)								
Waveform	Pure sine wave								
<b>BATTERY</b>									
Battery Voltage	12 VDC		24 VDC		48 VDC				
Floating Charge Voltage	13.5 VDC		27 VDC		54 VDC				
Overcharge Protection	16 VDC		31 VDC		33 VDC			63 VDC	
<b>SOLAR CHARGER &amp; AC CHARGER</b>									
Solar Charger type	PWM	MPPT	PWM	MPPT	PWM	MPPT		PWM	MPPT
Maximum PV Array Open Circuit Voltage	55 VDC	102 VDC	80 VDC	102 VDC	80 VDC	102 VDC	145 VDC	105 VDC	145 VDC
Maximum PV Array Power	600 W	500 W	1200 W	1000 W	1200 W	1000 W	1500 W	2400 W	3000 W
MPP Range @ Operating Voltage	N/A	17 ~ 80 VDC	N/A	30 ~ 80 VDC	N/A	30~80 VDC	30~115 VDC	N/A	60 ~ 115 VDC
Maximum Solar Charge Current	50 A	40 A	50 A	40 A	50 A	40 A	60 A	50 A	60 A
Maximum AC Charge Current	20 A	20 A	20 A	25 A	25A	25A	60 A	60 A	60 A
Maximum Charge Current	50 A	60 A	50 A	60 A	70 A	60 A	120 A	110 A	120 A
<b>PHYSICAL</b>									
Dimension, D x W x H (mm)	88 x 225 x 320				100 x 285 x 334		100 x 300 x 440	100 x 300 x 440	
Net Weight (kgs)	4.4	4.4	5	5	6.3	6.5	9.5	8.5	9.7
Communication Interface	USB/RS232								
<b>ENVIRONMENT</b>									
Humidity	5% to 95% Relative Humidity (Non-condensing)								
Operating Temperature	-10°C to 50°C								
Storage Temperature	-15°C to 60°C								

Product specifications are subject to change without further notice.



# Axpert VM II Off-Grid Inverter

## Operation without battery

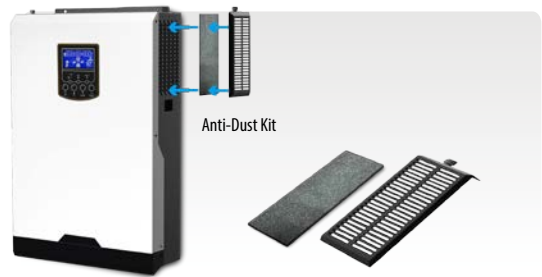


- Pure sine wave solar inverter
- Output power factor 1
- High PV input voltage range
- Inverter running without battery
- Built-in 80A MPPT solar charger
- Battery equalization function to optimize battery performance and extend lifecycle
- Built-in anti-dusk kit for harsh environment

OFF-GRID INVERTER

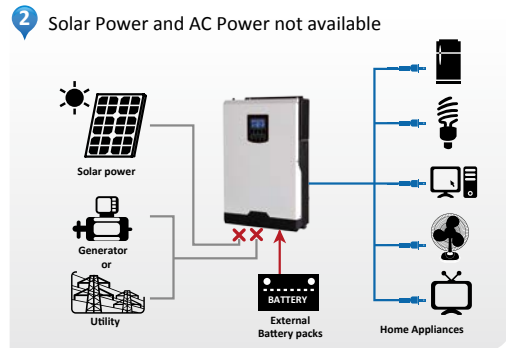
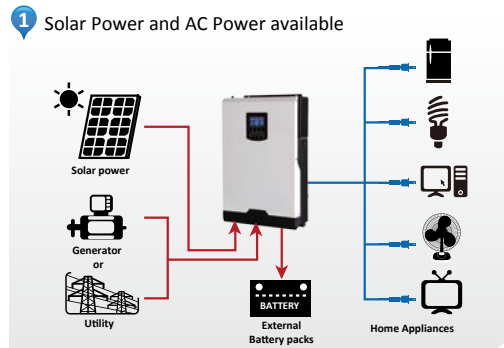
### Anti-Dust Kit

After installing this anti-dust kit, inverter will automatically detect this kit and activate internal thermal sensor to adjust internal temperature. By virtue of the dustproof design, it dramatically increases product reliability in harsh environment.

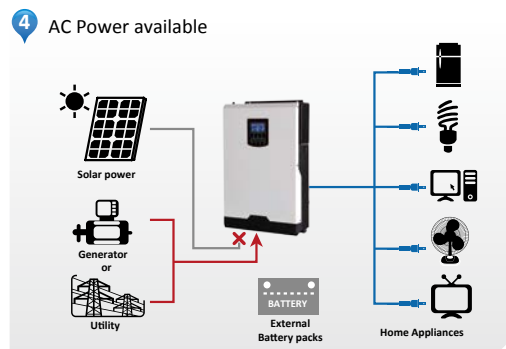
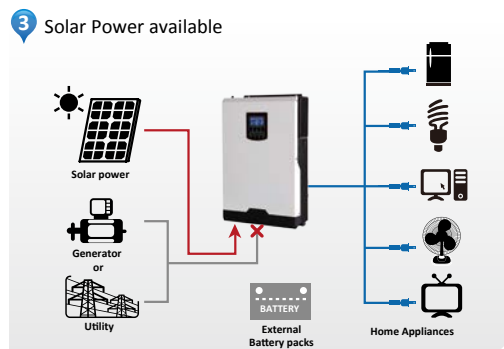


### System Diagram:

#### Operation with battery connected



#### Operation without battery connected



## Axpert VM II Off-Grid Inverter Selection Guide

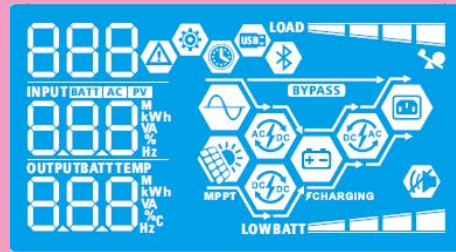
MODEL	Axpert VM II 3000-24	Axpert VM II 5000-48
Rated Power	3000VA / 3000W	5000VA / 5000W
<b>INPUT</b>		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
<b>OUTPUT</b>		
AC Voltage Regulation (Batt. Mode)	230VAC $\pm$ 5%	
Surge Power	6000VA	10000VA
Efficiency (Peak)	90% ~ 93%	
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)	
Waveform	Pure sine wave	
<b>BATTERY</b>		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>		
Maximum PV Array Open Circuit Voltage	500 VDC	500 VDC
Maximum PV Array Power	4000 W	5000 W
MPP Range @ Operating Voltage	120~450 VDC	120~450 VDC
Maximum Solar Charge Current	80 A	80 A
Maximum AC Charge Current	60 A	60 A
Maximum Charge Current	80 A	80 A
<b>PHYSICAL</b>		
Dimension, D x W x H (mm)	100 x 300 x 440	
Net Weight (kgs)	9	10
Communication Interface	USB/RS232	
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 60°C	

Product specifications are subject to change without further notice.

# Axpert VM III Off-Grid Inverter

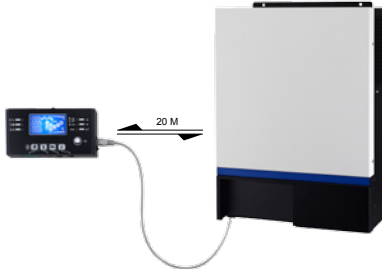


## LCD Display Panel



- Detachable LCD control module with various communications

This detachable LCD control module can be turned to remote panel. Users can install the LCD panel in accessible area away from inverter up to 20 meters.



- Integrated Bluetooth interface with Android App

VM III series is integrated Bluetooth interface ready for mobile monitoring. It's easy to be configured with a PC or laptop with Bluetooth interface. This technology allows wireless communication up to 6~7m in an open space. Now, WatchPower App is available in google store.



- Supports USB On-the-Go function

VM III series supports USB On-the-Go function to facilitate data upload/download.



- Reserved communication port (RS-485, CAN-BUS or RS-232) for BMS

This third generation inverter is reserved communication port for BMS. For the detailed information, please contact sales directly.

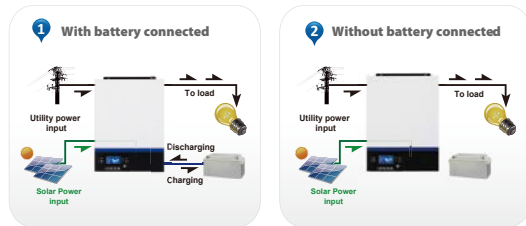


- Battery equalization extends lifecycle

This inverter charger is built in battery equalization function. This function will help remove sulfation to optimize battery performance and even extend lifecycle.

- Battery independency

Inverter can keep supplying power to the loads from PV energy or the grid without battery connected.



- User-friendly LCD operation

Users can easily set up or change the charging current, output source and charger source prioritization through LCD control panel to optimize inverter performance.



- Replaceable fan design

VM III series is designed with replaceable fan. It will simplify the maintenance and reduce the maintenance cost.



## Axpert VM III Off-Grid Inverter Selection Guide

MODEL	Axpert VM III-1500-24	Axpert VM III-3000-24	Axpert VM III 5000-48
Rated Power	1500VA/1500W	3000VA/3000W	5000VA/5000W
<b>INPUT</b>			
Voltage	230 VAC		
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)		
Frequency Range	50 Hz/60 Hz (Auto sensing)		
<b>OUTPUT</b>			
AC Voltage Regulation (Batt. Mode)	230VAC $\pm$ 5%		
Surge Power	3000VA	6000VA	10000VA
Efficiency (Peak)	90% ~ 93%		
Transfer Time	10 ms (For Personal Computers) 20 ms (For Home Appliances)		
Waveform	Pure sine wave		
<b>BATTERY</b>			
Battery Voltage	24 VDC		48 VDC
Floating Charge Voltage	27 VDC		54 VDC
Overcharge Protection	33 VDC		63 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>			
Solar Charger type	MPPT		
Maximum PV Array Power	2000W	4000W	5000W
MPP Range @ Operating Voltage	120 ~ 380 VDC	120 ~ 450 VDC	
Maximum PV Array Open Circuit Voltage	400 VDC	500 VDC	
Maximum Solar Charge Current	60A	80A	
Maximum AC Charge Current	40A	60A	
Maximum Charge Current	60A	80A	
<b>PHYSICAL</b>			
Dimension, D x W x H (mm)	100 x 280 x 390	115 x 300 x 400	
Net Weight (kgs)	8.5	9	10
Communication Interface	USB/RS232/RS485/Bluetooth/Dry-contact		
<b>OPERATING ENVIRONMENT</b>			
Humidity	5% to 95% Relative Humidity (Non-condensing)		
Operating Temperature	-10°C to 50°C		
Storage Temperature	-15°C to 60°C		

Product specifications are subject to change without further notice.

# Axpert King Off-Grid Inverter



- Zero transfer time to protect mission-critical loads such as servers and ATM.
- Detachable LCD control module with multiple communications
- Built-in Bluetooth for mobile monitoring (Android App is available)
- Supports USB On-the-Go function
- Reserved communication port for BMS (RS485, CAN-BUS or RS232)
- Configurable AC/PV output usage timer and prioritization
- Parallel operation up to 9 units

## Axpert King Off-Grid Inverter Selection Guide

MODEL	Axpert King 3K	Axpert King 5K
Rated Power	3000VA/3000W	5000VA/5000W
Parallel Capability	Up to 9 units	Up to 9 units
<b>INPUT</b>		
Voltage	230 VAC	
Voltage Range	110-280 VAC	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
<b>OUTPUT</b>		
AC Voltage Regulation	230 VAC $\pm$ 5%	
Output THDv	<3% for linear load, <8% for non-linear load	
Surge Power	6000VA for 5 sec	10000VA for 5 sec
Efficiency (Peak)	93 % at Line Mode, 90% at Battery Mode	
Transfer Time	0 ms	
Waveform	Pure sine wave	
<b>BATTERY</b>		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	34 VDC	66 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>		
Solar Charger Type	MPPT	MPPT
Maximum PV Array Open Circuit Voltage	145 VDC	
Maximum PV Array Power	1500 W	4000 W
MPP Range @ Operating Voltage	30 ~ 115 VDC	60~115VDC
Maximum Solar Charge Current	60 A	80 A
Maximum AC Charge Current	60 A	60 A
Maximum Charge Current	120 A	140 A
<b>PHYSICAL</b>		
Dimension, D x W x H (mm)	140 x 303 x 525	
Net Weight (kgs)	13.0	13.5
Communication Interface	USB/RS232/RS485/Bluetooth/Dry-contact	
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	0°C to 55°C	
Storage Temperature	-15°C to 60°C	

Product specifications are subject to change without further notice.

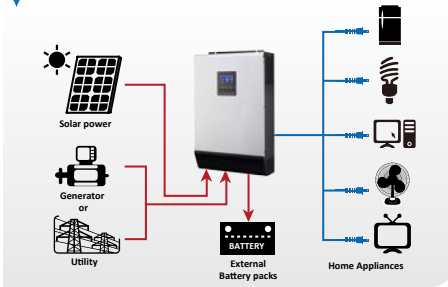
# Axpert KS Off-Grid Inverter



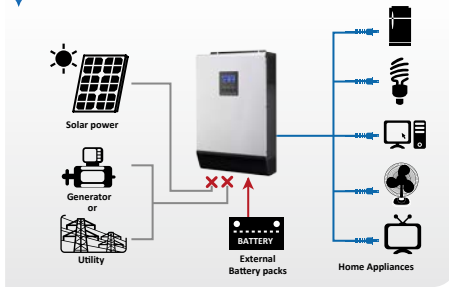
- Pure sine wave inverter
- Output power factor 1 (only 0.8 for 3KP/5KP models)
- Selectable input voltage range for home appliances and personal computers
- Selectable charging current based on applications
- Configurable AC/Solar input priority via LCD setting
- Compatible to AC mains or generator power
- Parallel operation with up to 9 units only available for 3KP/4KVA/5KVA/5KP models\*
- Battery equalization for optimized battery performance and lifecycle
- Optional remote panel available

## Off-grid inverter with PWM solar charge controller

1 Solar Power and AC Power available



2 Solar Power and AC Power not available



## Axpert KS Off-Grid Inverter Selection Guide

MODEL	Axpert KS 1K	Axpert KS 2K	Axpert KS 3K	Axpert KS 3KP	Axpert KS 4K	Axpert KS 5K	Axpert KS 5KP
Rated Power	1000VA/1000W	2000VA/2000W	3000VA/3000W	3000VA/2400W	4000VA/4000W	5000VA/5000W	5000VA/4000W
Parallel Capability	No	No	No	Yes, 9 units	Yes, 9 units	Yes, 9 units	Yes, 9 units
<b>INPUT</b>							
Voltage	230 VAC						
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)						
Frequency Range	50 Hz/60 Hz (Auto sensing)						
<b>OUTPUT</b>							
AC Voltage Regulation (Batt. Mode)	230VAC ± 5 %						
Surge Power	2000VA	4000VA	6000VA	6000VA	8000VA	10000VA	10000VA
Efficiency (Peak)	90%	93%		90%	93%		90%
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)						
Waveform	Pure sine wave						
<b>BATTERY</b>							
Battery Voltage	12 VDC	24 VDC		24 VDC	48 VDC		24 VDC
Floating Charge Voltage	13.5 VDC	27 VDC		27 VDC	54 VDC	54 VDC Max: 58VDC (optional 64VDC, please check with sales)	27 VDC
Overcharge Protection	15.5 VDC	31 VDC		30 VDC	60 VDC	60 VDC (optional 66VDC, please check with sales)	30 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>							
Maximum PV Array Open Circuit Voltage	50VDC	60VDC		75VDC	90VDC		75VDC
Maximum PV Array Power	600 W	1200 W		1200 W	2400W		1200 W
Standby Power Consumption	1 W	2 W		2 W	5W		5W
Maximum Solar Charge Current	50A	50A		50A	50A		50A
Maximum AC Charge Current	20 A	30 A		60 A	60 A		60 A
Maximum Charge Current	50 A		110 A		110 A		110 A
<b>PHYSICAL</b>							
Dimension, D x W x H (mm)	95 x 240 x 316	100 x 272 x 355		100 x 272 x 385	155 x 295 x 455		180 x 310 x 475
Net Weight (kgs)	5.0	6.4	6.9	7.5	9.8	9.8	12.5
<b>ENVIRONMENT</b>							
Humidity	5% to 95% Relative Humidity (Non-condensing)						
Operating Temperature	0°C - 55°C						
Storage Temperature	-15°C - 60°C						

\*Typical transfer time for parallel operation is 30ms.  
Product specifications are subject to change without further notice.



# Axpert MKS Off-Grid Inverter



- Pure sine wave inverter
- Output power factor 1 (only 0.8 for 3KP/5KP models)
- Built-in MPPT solar charge controller
- Selectable input voltage range for home appliances and personal computers
- Selectable charging current based on applications
- Configurable AC/Solar input priority via LCD setting
- Compatible to AC mains or generator power
- Battery equalization for optimized battery performance and lifecycle
- Parallel operation with up to 9 units only available for Axpert MKS 3KP/4KVA/5KVA/5KP\*

OFF-GRID INVERTER

## Axpert MKS Off-Grid Inverter Selection Guide

MODEL	Axpert MKS 1K-12	Axpert MKS 2K-24	Axpert MKS 3K-24	Axpert MKS 3KP-24	Axpert MKS 4K	Axpert MKS 5K	Axpert MKS II 5K	Axpert MKS 5KP
Rated Power	1000VA/ 1000W	2000VA/ 2000W	3000VA/ 3000W	3000VA/ 2400W	4000VA/ 4000W	5000VA/ 5000W	5000VA/ 5000W	5000VA/ 4000W
Parallel Capability	No	No	No	Yes, 9 units	Yes, 9 units	Yes, 9 units	Yes, 9 units	Yes, 9 units
<b>INPUT</b>								
Voltage	230 VAC							
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)							
Frequency Range	50 Hz/60 Hz (Auto sensing)							
<b>OUTPUT</b>								
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%							
Surge Power	2000VA	4000VA	6000VA		8000VA	10000VA		
Efficiency (Peak)	90% - 93%	93%		90%	93%	93%	90%	90%
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)							
Waveform	Pure sine wave							
<b>BATTERY</b>								
Battery Voltage	12 VDC (24VDC and 48VDC versions are also available)	24 VDC	24 VDC (48VDC version is also available)	24 VDC	48 VDC		24 VDC	
Floating Charge Voltage	13.5 VDC	27 VDC	27 VDC	27 VDC	54 VDC	54 VDC (optional 64VDC, please check with sales)	54 VDC	27 VDC
Overcharge Protection	15.5 VDC	31 VDC	31 VDC	30 VDC	60 VDC	60 VDC (optional 66VDC, please check with sales)	66 VDC	30 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>								
Maximum PV Array Power	500 W	600W	600W	1000W	4000W		4500W	2000W
MPPT Range @ Operating Voltage	15 VDC ~ 80 VDC	30 VDC~ 66 VDC	30 VDC~ 66 VDC	30 VDC~ 80 VDC	60 VDC~ 115 VDC	120 VDC~ 430 VDC		30 VDC~ 115 VDC
Maximum PV Array Open Circuit Voltage	102 VDC	75VDC	75VDC	100VDC	145 VDC		450 VDC	145 VDC
Maximum Solar Charge Current	40A	25A	25A	40A	80 A		80 A	80A
Maximum AC Charge Current	20A	30A	30A	60A	60 A		80 A	60A
Maximum Charge Current	60A	55A	55A	100A	140 A		80 A	140A
<b>PHYSICAL</b>								
Dimension, DxWxH (mm)	95 x 240 x 316	100 x 272 x 355		100 x 272 x 385	120 x 295 x 468		180 x 310 x 475	
Net Weight (kgs)	5.2	7.0	7.4	7.5	12.5	13.5	11	12.5
<b>ENVIRONMENT</b>								
Humidity	5% to 95% Relative Humidity (Non-condensing)							
Operating Temperature	0°C - 55°C							
Storage Temperature	-15°C - 60°C							

\* Typical transfer time for parallel operation is 30ms. Product specifications are subject to change without further notice.

# Axpert EX/MEX Off-Grid Inverter



- Pure sine wave inverter
- Built-in MPPT or PWM solar charger based on different models
- Enhance AC charger to 60A and solar charger to 40A
- Wide battery input range
- Selectable input voltage range for home appliances and personal computers
- Selectable high power charging current
- Configurable AC/Solar input priority via LCD setting
- Compatible to AC mains or generator power

## Axpert EX/MEX Off-Grid Inverter Selection Guide

MODEL	Axpert EX 1.5K-12	Axpert EX 1.5K-24	Axpert EX 3K-24	Axpert MEX 1.5K-12	Axpert MEX 1.5K-24	Axpert MEX 3K-24
Rated Power	1500VA/1200W		3000VA/2400W	1500VA/1200W		3000VA/2400W
<b>INPUT</b>						
Voltage	220/230/240 VAC			230 VAC		
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)					
Frequency Range	50 Hz/60 Hz (Auto sensing)					
<b>OUTPUT</b>						
AC Voltage Regulation (Batt. Mode)	220/230/240VAC ± 5%			230VAC ± 5%		
Surge Power	3000VA		6000VA	3000VA		6000VA
Efficiency (Peak)	90% ~ 93%					
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)					
Waveform	Pure sine wave					
<b>BATTERY</b>						
Battery Voltage	12 VDC		24 VDC	12 VDC		24 VDC
Floating Charge Voltage	13.5 VDC		27 VDC	13.5 VDC		27 VDC
Overcharge Protection	16 VDC		32 VDC	16 VDC		32 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>						
Solar Charger Type	PWM			MPPT		
Maximum PV Array Power	600W		1200W	500W		1000W
MPPT Range @ Operating Voltage	N/A			15 VDC ~ 80 VDC	30 VDC ~ 80 VDC	
Maximum PV Array Open Circuit Voltage	50 VDC		75 VDC	100 VDC		
Maximum Solar Charge Current	50A			40A		
Maximum AC Charge Current	60A			60A		
Maximum Charge Current	110A			100A		
<b>PHYSICAL</b>						
Dimension, D x W x H (mm)	100 x 272 x 355					
Net Weight (kgs)	6.6			7.0		
<b>ENVIRONMENT</b>						
Humidity	5% to 95% Relative Humidity (Non-condensing)					
Operating Temperature	-20°C to 55°C					
Storage Temperature	-30°C to 60°C					

Product specifications are subject to change without further notice.

# Axpert MKS Plus Off-Grid Inverter



- Pure sine wave inverter
- Output power factor 1
- Built-in MPPT solar charge controller
- Selectable input voltage range for home appliances and personal computers
- Selectable charging current based on applications
- Configurable AC/Solar input priority via LCD setting
- Compatible to AC mains or generator power
- Optional remote panel available

## Axpert MKS Plus Off-Grid Inverter Selection Guide

MODEL	Axpert MKS 2K-24 Plus	Axpert MKS 2K-48 Plus	Axpert MKS 3K-24 Plus	Axpert MKS 3K-48 Plus
Rated Power	2000VA/2000W	2000VA/2000W	3000VA/3000W	3000VA/3000W
<b>INPUT</b>				
Voltage	230 VAC			
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)			
Frequency Range	50 Hz/60 Hz (Auto sensing)			
<b>OUTPUT</b>				
AC Voltage Regulation (Batt. Mode)	230VAC $\pm$ 5%			
Surge Power	4000VA			6000VA
Efficiency (Peak)	90% - 93%			
Transfer Time	10 ms (For Personal Computers) 20 ms (For Home Appliances)			
Waveform	Pure sine wave			
<b>BATTERY</b>				
Battery Voltage	24 VDC	48 VDC	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC	27 VDC	54 VDC
Overcharge Protection	31 VDC	62 VDC	31 VDC	62 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>				
Maximum PV Array Power	1500 W	3000 W	1500 W	3000 W
MPPT Range @ Operating Voltage	30 ~ 115 VDC	60 ~ 115 VDC	30 ~ 115 VDC	60 ~ 115 VDC
Maximum PV Array Open Circuit Voltage	145 VDC			
Maximum Solar Charge Current	60A			
Maximum AC Charge Current	20 A or 30 A (Selectable)	10 A or 15 A (Selectable)	20 A or 30 A (Selectable)	10 A or 15 A (Selectable)
Maximum Charge Current	90 A	75 A	90 A	75 A
Maximum Efficiency	98%			
Standby Power Consumption	2 W			
<b>PHYSICAL</b>				
Dimension, D x W x H (mm)	140 x 295 x 479			
Net Weight (kgs)	11.5			
<b>ENVIRONMENT</b>				
Humidity	5% to 95% Relative Humidity (Non-condensing)			
Operating Temperature	0°C - 55°C			
Storage Temperature	-15°C - 60°C			

Product specifications are subject to change without further notice.

# Axpert Plus Duo/Tri Off-Grid Inverter



- Pure sine wave inverter
- Built-in 2 or 3 strings of MPPT solar charge controller depending on models
- Wide battery input range
- Selectable input voltage range for home appliances and personal computers
- Selectable high power charging current
- Configurable AC/Solar input priority via LCD setting
- Compatible to AC mains or generator power
- Optional remote panel available
- Multiple communication : USB & SNMP
- Parallel operation with up to 9 units only available for 5KVA

## Axpert Plus Duo/Tri Off-Grid Inverter Selection Guide

MODEL	Axpert Plus Duo 1.5K-12	Axpert Plus Duo 1.5K-48	Axpert Plus Duo 3K-24	Axpert Plus Duo 3K-48	Axpert Plus Duo 5K	Axpert Plus Tri 5K
Rated Power	1500VA/1200W		3000VA/2400W		5000VA/4000W	
<b>INPUT</b>						
Voltage	230 VAC					
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)					
Frequency Range	50 Hz/60 Hz (Auto sensing)					
<b>OUTPUT</b>						
AC Voltage Regulation (Batt. Mode)	230VAC $\pm$ 5%					
Surge Power	3000VA		6000VA		10000VA	
Efficiency (Peak)	90% - 93%					
Transfer Time	10 ms (For Personal Computers) 20 ms (For Home Appliances)					
Waveform	Pure sine wave					
<b>BATTERY</b>						
Battery Voltage	12 VDC	48 VDC	24 VDC	48 VDC	48 VDC	48 VDC
Floating Charge Voltage	13.5 VDC	54 VDC	27 VDC	54 VDC	54 VDC	54 VDC
Overcharge Protection	16 VDC	62 VDC	32 VDC	62 VDC	60 VDC	60 VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>						
Maximum PV Array Power	1000W	2000W	2000W	3000 W	6000W	9000W
MPPT Range @ Operating Voltage	15~80 VDC	60 ~ 90 VDC	30~80 VDC	60 ~ 90 VDC	60~115 VDC	
Maximum PV Array Open Circuit Voltage	100 VDC				145 VDC	
Maximum Solar Charge Current	40A x 2	20A x 2	40A x 2	30A x 2	60A x 2	60A x 3
Maximum AC Charge Current	60 A	30 A	60 A	60 A	60 A	60 A
Maximum Charge Current	140 A	70 A	140 A	120 A	180 A	240 A
Maximum Efficiency	98%					
<b>PHYSICAL</b>						
Dimension, DxWxH(mm)	124 x 272 x 400				194 x 295 x 455	
Net Weight (kgs)	8.0				16	17
<b>ENVIRONMENT</b>						
Humidity	5% to 95% Relative Humidity (Non-condensing)					
Operating Temperature	-20°C to 55°C				0°C to 55°C	
Storage Temperature	-30°C to 60°C				-15°C to 60°C	

Product specifications are subject to change without further notice.

# Alfa Off-Grid Inverter



- Built-in boost and buck AVR
- Built-in solar charger
- User-configurable setting via LCD panel
- Compatible to AC mains or generator power
- Flexible mechanical design to suit wall-mounting and desktop
- Suitable for home appliances and personal computers
- Intelligent communication

## Alfa Off-Grid Inverter Selection Guide

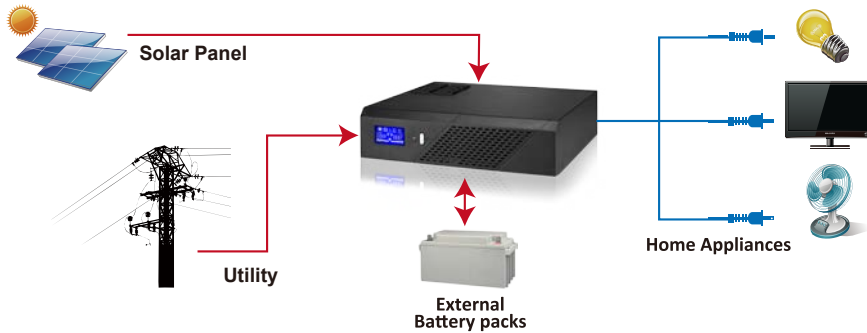
MODEL	Alfa-P3000-24	Alfa-M3000-24	Alfa-P5000-48	Alfa-M5000-48
Rated Power	3000VA/2400W		5000VA/4000W	
<b>INPUT</b>				
Voltage	230 VAC			
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)			
Frequency Range	50 Hz/60 Hz (Auto sensing)			
<b>OUTPUT</b>				
AC Voltage Regulation (Batt. Mode)	230VAC $\pm$ 5%			
AC Voltage Regulation (AVR Mode)	230VAC $\pm$ 10%			
Surge Power	6000VA		10000VA	
Efficiency (Peak)	90% ~ 93%			
Transfer Time	10 ms (For Personal Computers) 20 ms (For Home Appliances)			
Waveform	Pure sine wave			
<b>BATTERY</b>				
Battery Voltage	24VDC		48VDC	
Floating Charge Voltage	27VDC		54VDC	
Overcharge Protection	32VDC		60VDC	
<b>SOLAR CHARGER &amp; AC CHARGER</b>				
Solar Charger type	PWM	MPPT	PWM	MPPT
Maximum PV Array Open Circuit Voltage	75VDC	100VDC	105VDC	145VDC
Maximum Solar Charge Current	50A	40A	50A	80A
Maximum AC Charge Current	30 A		60 A	
Maximum Charge Current	80A	70A	110A	140A
<b>PHYSICAL</b>				
Dimension, D x W x H (mm)	340 x 380 x 88		420 x 397 x 120	
Net Weight (kgs)	12	13	16	17
<b>ENVIRONMENT</b>				
Humidity	5% to 95% Relative Humidity (Non-condensing)			
Operating Temperature	-10°C to 55°C			
Storage Temperature	-15°C to 60°C			

Product specifications are subject to change without further notice.

# Lobo Solar



- Simulated sine wave inverter
- Built-in 50A PWM solar charger
- Wide input voltage range
- 10A or 20A standard AC charging current
- LCD display for comprehensive information
- Overload, short circuit and reverse polarity protection



## Lobo Solar Inverter Selection Guide

MODEL	Lobo Solar 1.2K	Lobo Solar 2.4K
<b>CAPACITY</b>	1200 VA / 720 W	2400 VA / 1440 W
<b>INPUT</b>		
Voltage	230 VAC	
Input Voltage Range	90-280VAC	
Frequency Range	60Hz or 50 Hz (Auto sensing)	
<b>OUTPUT</b>		
Output voltage Regulation (Batt. Mode)	230 VAC ±10%	
Frequency Range (Batt. Mode)	60 Hz or 50 Hz ±1 Hz	
Transfer Time	20ms (Typical)	
Waveform (Batt. Mode)	Simulated Sine Wave	
<b>BATTERY</b>		
Battery Voltage	12VDC	24VDC
Acceptable Battery Type	Rechargeable lead-acid and deep discharge battery	
Acceptable Input Range for Charger	90~280 VAC	
DC Start Voltage	>11VDC	>22VDC
<b>AC CHARGER</b>		
Constant Current Charge Voltage	14.3VDC ± 2%	28.6VDC ± 2%
Floating Charge Voltage	13.7VDC ± 2%	27.4VDC ± 2%
Maximum Charge Current	10A or 20A	
<b>SOLAR CHARGER</b>		
Maximum PV Array Open Circuit Voltage	40 VDC	60 VDC
Operating Voltage Range	15~18 VDC	30~32 VDC
Maximum Solar Charge Current	50A	
<b>PROTECTION</b>		
Full Protection	Overload, short circuit and reverse polarity protection	
<b>PHYSICAL</b>		
Dimension, D x W x H (mm)	300 x 360 x 88	
Net Weight (kgs)	6.3	7.6
<b>ENVIRONMENT</b>		
Humidity	0 to 90% Relative Humidity (Non-condensing)	
Operating Temperature	0°C to 40°C	
Storage Temperature	-15°C to 50°C	

Product specifications are subject to change without further notice.



# Solar Inverter Selection Guide

	InfiniSolar V		InfiniSolar V II	
Power rating	1KW/2KW	3KW/4KW/5KW	1.5KW/2KW/3KW	6KW/9KW
Phase	Single Phase	Single Phase	Single Phase	3-Phase
Topology	Hybrid	Hybrid	Hybrid	Hybrid
Form Factor	Wall mount	Wall mount	Wall mount	Tower
Output Waveform	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave
Feed to grid	●	●	●	●
Accept AC power source	●	●	●	●
Solar charger	1 x MPPT	3KW/4KW: 1 x MPPT 5KW: 2 x MPPT	1 x MPPT	3 x MPPT
Parallel capability		●	Only for 3KW	●
Battery independency			●	●
AC/Solar priority setting	●	●	●	●
Software	SolarPower	SolarPower	SolarPower	SolarPower

	InfiniSolar		InfiniSolar TX	InfiniSolar TX-PA
Power rating	2KW/3KW/5KW	10KW	6KW/10KW/20KW	30KW
Phase	Single Phase	3-Phase	3-Phase	3-Phase
Topology	Hybrid	Hybrid	Hybrid	Hybrid
Form Factor	Wall mount	Wall mount	Tower	Tower
Output Waveform	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave
Feed to grid	●	●	●	●
Accept AC power source	●	●	●	●
Solar charger	2KW/3KW: 1 x MPPT 5KW: 2 x MPPT	2 x MPPT	1 x MPPT	1 x MPPT
Parallel capability	Only for 5KW	●		●
Battery independency	●	●	●	●
AC/Solar priority setting	●	●	●	●
Isolation Transformer			●	●
Software	SolarPower	SolarPower	SolarPower	SolarPower

\*This table is for reference only. For detailed charger size, please check model spec sheet directly.

# Solar Inverter Selection Guide

	Axpert V	Axpert VM II	Axpert VM III	Axpert King	Axpert KS	Axpert MKS
Power rating	1KVA-5KVA	3KVA-5KVA	1.5KVA/3KVA/5KVA	3KVA/5KVA	1KVA-5KVA	1KVA-5KVA
Phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
Topology	Off-grid	Off-grid	Off-grid	Off-grid	Off-grid	Off-grid
Output waveform	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave
Power Factor	1	1	1	1	1**	1**
Accept AC power source	.	.	.	.	.	.
Built-in AC charger*	1K-2K: 20A 3K-5K: 25A-60A*	60A	1.5K: 40A 3K/5K: 60A	60A	1K-3K: 20A-60A* 4K/5K: 60A	1K-3K: 15A-60A* 4K/5K: 60A
Solar charger	VP: PWM VM: MPPT	MPPT	MPPT	MPPT	PWM	MPPT
Solar charger capability*	VP: 50A VM: 40A - 60A*	80A	1.5KVA: 60A 3KVA/5KVA: 80A	3KVA: 60A 5KVA: 80A	50A	1K-3K: 18A-40A* 4K/5K: 80A
Parallel capability				.	Only for 3KP/4K/5K/5KP	Only for 3KP/4K/5K/5KP
Battery independency		.	.			
Removable LCD Module			.	.		
Input voltage selection	.	.	.	.	.	.
AC/solar priority setting	.	.	.	.	.	.
Unique Features				Zero transfer time		
Software	WatchPower	WatchPower	WatchPower	WatchPower	WatchPower	WatchPower

	Axpert EX	Axpert MEX	Axpert MKS Plus	Axpert Plus Duo/Tri	Alfa	Lobo Solar
Power rating	1.5KVA / 3KVA	1.5KVA / 3KVA	2KVA / 3KVA	1.5KVA-5KVA	3KVA / 5KVA	1.2KVA / 2.4KVA
Phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
Topology	Off-grid	Off-grid	Off-grid	Off-grid	Off-grid	Off-grid
Output waveform	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Simulated sine wave
Power Factor	0.8	0.8	1	0.8	0.8	0.6
Built-in AVR					.	Optional
Accept AC power source	.	.	.	.	.	.
Built-in AC charger*	60A	60A	15A-30A*	60A	3K: 30A 5K: 60A	10A or 20A
Solar charger	PWM	MPPT	MPPT	1.5K/3K: 2 x MPPT 5K: 3 x MPPT	Alfa-P: PWM Alfa-M: MPPT	PWM
Solar charger capability*	50A	40A	60A	1.5K / 3K: 40A-80A* 5K: 120A-180A*	3K: 40A-50A* 5K: 50A-80A*	50A
Parallel capability				only for 5K	only for 5K	
Input voltage selection	.	.	.	.	.	
AC/solar priority setting	.	.	.	.	.	
Software	WatchPower	WatchPower	WatchPower	WatchPower	WatchPower	

\*This table is for reference only. For detailed charger size, please check model spec sheet directly.  
 \*\* 3KP/5KP models are only applied for power factor 0.8.

# Aspire



- Built-in MPPT solar charger
- Supports single phase or three-phase asynchronous motor depending on models
- Supports single phase AC input when PV energy is not sufficient (only for Aspire 2.2KW LS model)
- Built-in full protection and self-diagnosis
- Soft start function prevents water hammer effect and extends system lifecycle
- Comprehensive LEDs and display screen for real-time system status
- Remote monitoring through RS-485
- Optional remote panel available

WATER PUMP INVERTER

## Aspire Water Pump Solar Inverter Selection Guide

MODEL	Aspire 2.2KW LS		Aspire 2.2KW	Aspire 7.5KW	Aspire 11KW
<b>RATED OUTPUT POWER</b>	2200 W(3HP) (supports 0.75~3HP water pump)		2200 W(3HP) (supports 0.75~3HP water pump)	7500 W(10HP) (supports 3~10HP water pump)	11000 W(15HP) (supports 10~15HP water pump)
<b>PV INPUT (DC)</b>					
Nominal DC Voltage / Maximum DC Voltage	320 VDC / 450 VDC			540 VDC / 800 VDC	
Start-up Voltage	120 VDC			250 VDC	
MPPT Voltage Range	120 VDC ~ 420 VDC			250 VDC ~ 780VDC	
Number of MPP Trackers				1	
<b>AC INPUT</b>					
Input Voltage	220/230/240 VAC (-15% ~ +10%)			N/A	
Input Frequency	47 Hz ~ 63 Hz				
<b>OUTPUT</b>					
Nominal Voltage	220/230/240 VAC	3 x 380/400/415 VAC		3 x 380/400/415/440 VAC	
Efficiency	> 97%			> 97%	
Nominal Output Current	14 A	10 A	5.0 A	15 A	22 A
Motor Type	Single-phase (default)	Three-phase	Three-phase asynchronous motor		
Frequency Precision				±0.2%	
<b>PROTECTION</b>					
Full Protection	Phase lost, dry pumping, motor locked, weak sunlight, over-voltage, under-voltage, over-current, surge, over-temperature and short circuit protection				
<b>PHYSICAL</b>					
Dimension, D X W X H (mm)	110 x 230 x 342				
Net Weight (kgs)	5		5.5	6	6.5
IP Protection	IP20				
<b>INTERACE</b>					
Communication Port	RS-232/RS-485				
<b>ENVIRONMENT</b>					
Humidity	< 95% RH (Non-condensing)				
Operating Temperature	-20°C~45°C at 100% full load, 46°C~60°C power derating				

Product specifications are subject to change without further notice.

# Remote Monitoring & Management



SNMP Web Card



SNMP Web Pro



Modbus Card



Modbus Box

### SNMP Web Card

- Allow control and monitoring of multiple inverters through RJ-45 network connection
- Real-time dynamic graphs of inverter data
- Warning notifications via audible alarm, broadcast, mobile messenger, e-mail and SNMP traps
- Historic data log stored in centralized PC database
- Simple firmware upgrade with one click
- Password security protection and remote access management
- Support optional environmental monitoring detector for temperature, humidity and smoke

### SNMP Web Pro

- Built-in web server to control and monitoring of multiple inverters through LAN or Internet
- Built-in 32MB flash memory to save more than 2 million threads
- Set with real-time clock to record log by date and keep running up to 7 days even without power connection.
- Support EMD monitoring and SMS service

### Modbus Card

- Real-time control and monitoring of multiple inverters via RS-485 communication port
- Supports Modbus RTU protocol
- Provide MODBUS functions including read Holding Registers and write Registers
- Provide surge protection

### Modbus Box

- Support to monitor off-grid inverter through modbus interface
- Implement MODBUS RTU protocol
- Integrated with WatchPower software
- Support Axpert series inverter

## Monitoring Software

### SolarPower



SolarPower is a solar inverter monitoring software. It can monitor multiple devices via **USB and Serial port** at the same time. The major functions of SolarPower monitoring software include data log for devices, power generation statistics, alarm messages, fault messages and parameter setting for devices.

### SolarPower Pro



SolarPower Pro is a solar inverter monitoring software to monitor up to 247 devices via **modbus or SNMP** interface. It allows web browsing in a networking environment. The major functions of SolarPower Pro monitoring software include data log for devices, power generation statistics, alarm messages, fault messages, and parameter setting for devices.

### WatchPower



WatchPower is an off-grid inverter monitoring software which can monitor multiple Axpert devices via serial port at the same time. The major functions include data log for devices, alarm and fault recording. Besides, it also can configure advanced parameters such as charger source priority, output source priority, AC input range and battery type based on diverse applications.

# GPRS/3G/Wi-Fi Card & Box



GPRS/3G Card

Wi-Fi Card

### GPRS/3G Card & Box

- Allow to access historic data in centralized data center
- Built-in SIM card slot
- Data transmission to data center via the Internet
- Warning notifications via mobile messenger
- Historic data log stored in centralized PC databas or Email
- Remotely monitoring inverter(s) data through the data server at any time

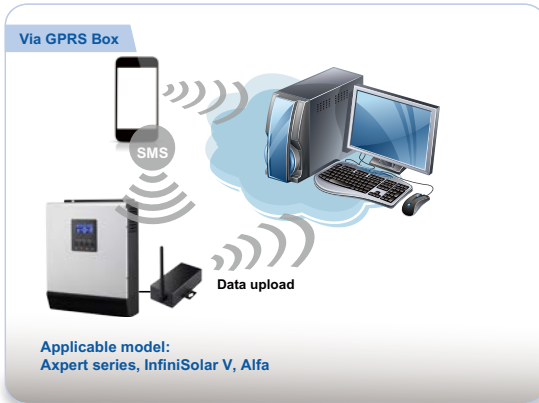
### Wi-Fi Card & Box

- Upload information to data server via wireless network
- Remotely monitoring inverter(s) data through the data server at any time
- Event Notification via Email
- Built-in web server
- Automatic firmware upgrade



Box version is ready now!

**Access Your Inverter Power Generation Data Anywhere**  
[www.datacenter.com](http://www.datacenter.com)



## GPRS/3G/Wi-Fi Card Selection Guide

MODEL	GPRS Card	3G Card	Wi-Fi Card
Network Support	GPRS /GSM 850/900/1800/1900 • Multislot Class 12 • Full PBCCH support • Mobile Station Class B"	GSM/GPRS/EDGE: Dual band GSM 900/1800MHz UMTS/HSPA+: Dual band UMTS 900/2100MHz	802.11 b/g/n STA, AP, P2P
Network Protocol	TCP/IP, UDP, HTTP, HTTPS, IPv4, SSL		
SIM Card	Micro card 12 x 15 mm	Micro card 12 x 15 mm	N/A
Communication Interface	Golden finger		
Power Input	12 V		
Power Consumption	2 watt (max.)		
Firmware Upgrade	Via network		
Operating Temperature	-10°C ~ 75°C		
Operating Humidity	0 ~ 95%		
Storage Temperature	-15°C ~ 85°C		
Dimension, D x W x H (mm)	23 x 47 x 15		

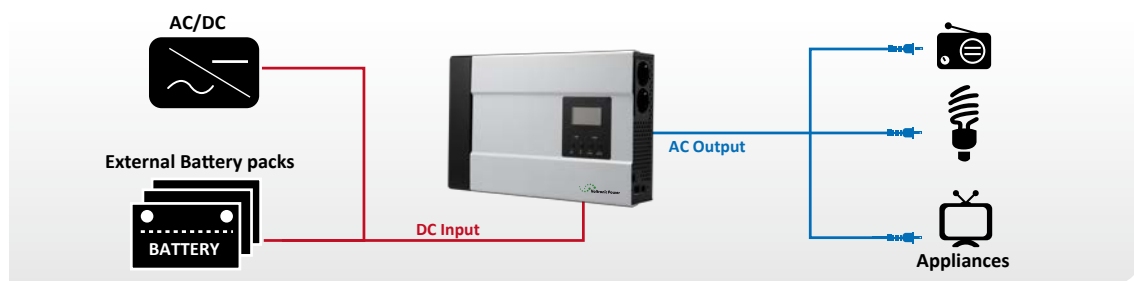
Product specifications are subject to change without further notice.

# Axpert GS Inverter



- Pure sine wave inverter
- Isolation design between input and output for safety guarantee
- Lightweight, stainless steel, and anodised aluminium casing
- Low power consumption for energy saving
- Over-temperature, DC reverse polarity and short circuit protection
- Low/High battery alarm and protection

DC/AC inverter without charger



## Axpert GS Inverter Selection Guide

MODEL	Axpert GS 2K	Axpert GS 3K
Rated Power	2000VA/1600W	3000VA/2400W
<b>INPUT</b>		
Nominal DC Voltage	24 VDC	
Cold Start Voltage	23 VDC	
Acceptable Voltage Range	21 VDC ~ 29 VDC	
Low DC Warning Voltage		
@ load <20%	22.0 VDC	
@ 20% ≤ load < 50%	21.4 VDC	
@ load ≥ 50%	20.2 VDC	
Low DC Warning Return Voltage		
@ load <20%	23.0 VDC	
@ 20% ≤ load < 50%	22.4 VDC	
@ load ≥ 50%	21.2 VDC	
Low DC Cut-off Voltage		
@ load <20%	21.0 VDC	
@ 20% ≤ load < 50%	20.4 VDC	
@ load ≥ 50%	19.2 VDC	
Efficiency	> 90 %	
No Load Power Consumption	< 20 W	
Saving Mode Power Consumption	< 10 W	
<b>OUTPUT</b>		
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	
Surge Power	4000VA	6000VA
Waveform	Pure sine wave	
<b>PHYSICAL</b>		
Dimension, D x W x H (mm)	82 x 232 x 369	
Net Weight (kgs)	4.3	4.3
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	0°C - 55°C	
Storage Temperature	-15°C - 60°C	

Product specifications are subject to change without further notice.

# SolaPalm

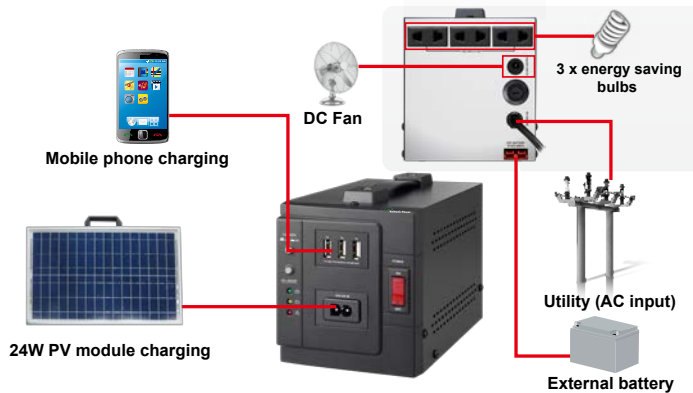


- 70W DC UPS
- 3 sets of DC-powered outlets for energy saving bulbs
- 1 x 12V DC output connector for DC fan
- Accepts either PWM solar charger or AC charger
- Optional 3 x 5V USB charger ports for mobile phones
- Off-mode charging
- Overload protection in battery mode and short circuit protection
- 3-step charging design to extend battery life
- Optional lamp holder with 2m cable

**Devices:**



SOLAR LIGHTING SOLUTION



## SolaPalm Lighting Solution Specification

MODEL		SolaPalm 70
CAPACITY		70 W
PV INPUT		
Maximum PV Array Open Circuit Voltage		30 VDC
Maximum Solar Charging Current		2 A
AC INPUT		
Nominal Voltage		230 VAC
Nominal Frequency		50/60 Hz (Auto sensing)
OUTPUT		
2-pin Sockets	Output Voltage (AC Mode)	230 VDC
	Output Voltage (Batt. Mode)	160-230 VDC ± 10%
	Waveform (Batt. Mode)	DC Output
DC Connector		12VDC 2A x 1pcs
USB Charger (optional)		5VDC 1A x 3pcs
BATTERY & CHARGER		
Battery Type and Numbers		12V 7Ah x 1 (Optional external battery)
Battery Voltage		12 VDC
Floating Voltage		13.7V ±1.5%
Shutdown Voltage		11V
Typical Recharge Time		8 hours recover to 90% capacity
Total Charging Current*		1 A or 2 A (Selectable)
PROTECTION		
Full Protection		Overload Protection and short circuit protection
PHYSICAL		
Dimension, D x W x H (mm)		229 x 110 x 123.5
Net Weight (kgs)		3.8
ENVIRONMENT		
Humidity		0-90 % RH @ 0- 40°C (Non-condensing)
Noise Level		Less than 40dB

\*Total charging current includes solar charger and AC charger.  
Product specifications are subject to change without further notice.

# SolaLight



- 3W solar panel included
- Built-in Ultra-light LED
- 2 sets of 12V LED Bulbs included
- Built-in USB charger port for mobile device
- Built-in Lithium-ion Battery (>4000mAh)

## Package Contents:



Running Time	
	= 12hrs
	= 6hrs
	= 12hrs

## Solalight Lighting Solution Specification

MODEL	SolaLight
Power Consumption by LED Bulb	1.2W/each
Solar Input Range	5~8 VDC
LED DC Output	12VDC/0.5A
USB Output	5VDC 1A
<b>INDICATORS</b>	
Battery Full	Green LED lighting
Battery Charging	Red LED lighting
Low Battery	Green LED flashing
<b>BATTERY &amp; CHARGER</b>	
Battery Type	Lithium-ion
Battery Voltage	3.6 VDC
Constant Charging Voltage	4.2 VDC
Shutdown Voltage	3 VDC
Charging Current	Via Solar Panel: 0.5A Via Micro USB: 1A
Typical Charging Time	Via Solar Panel: 9 hours Via Micro USB: 4 hours
<b>ENVIRONMENT</b>	
Operating Temperature	0- 40°C (Non-condensing)
Relative Humidity	0-90 %

Product specifications are subject to change without further notice.

