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-dust kit for harsh environment

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

1. Solar Power and AC Power available

2. Solar Power and AC Power not available

Operation without battery connected

3. Solar Power available

4. AC Power available
# Axpert VM II Off-Grid Inverter Selection Guide

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Axpert VM II 3000-24</th>
<th>Axpert VM II 5000-48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Power</td>
<td>3000VA / 3000W</td>
<td>5000VA / 5000W</td>
</tr>
</tbody>
</table>

## INPUT
- **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)

## OUTPUT
- **AC Voltage Regulation (Batt. Mode)**: 230VAC ± 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

## BATTERY
- **Battery Voltage**: 24 VDC | 48 VDC
- **Floating Charge Voltage**: 27 VDC | 54 VDC
- **Overcharge Protection**: 32 VDC | 63 VDC

## SOLAR CHARGER & AC CHARGER
- **Maximum PV Array Open Circuit Voltage**: 500 VDC | 500 VDC
- **Maximum PV Array Power**: 4000 W | 4000 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

## PHYSICAL
- **Dimension, D x W x H (mm)**: 100 x 300 x 440
- **Net Weight (kgs)**: 9 | 10
- **Communication Interface**: USB/RS232

## ENVIRONMENT
- **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.