

Axpert VM II Off-Grid Inverter

Operation without battery



- Pure sine wave solar inverter
- Output power factor 1
- High PV input voltage range
- Battery independent design
- Built-in 100A MPPT solar charger
- Battery equalization function to optimize battery performance and extend lifecycle
- Built-in anti-dust kit for harsh environment
- Dual outputs selected as either programmable output or generator input

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
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 \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	
Dual Outputs	Yes	
BATTERY		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
SOLAR CHARGER & AC CHARGER		
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	100 A	100 A
Maximum AC Charge Current	100 A	100 A
Maximum Charge Current	100 A	100 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.

182 M10 cells half cut Mono-crystallineModule

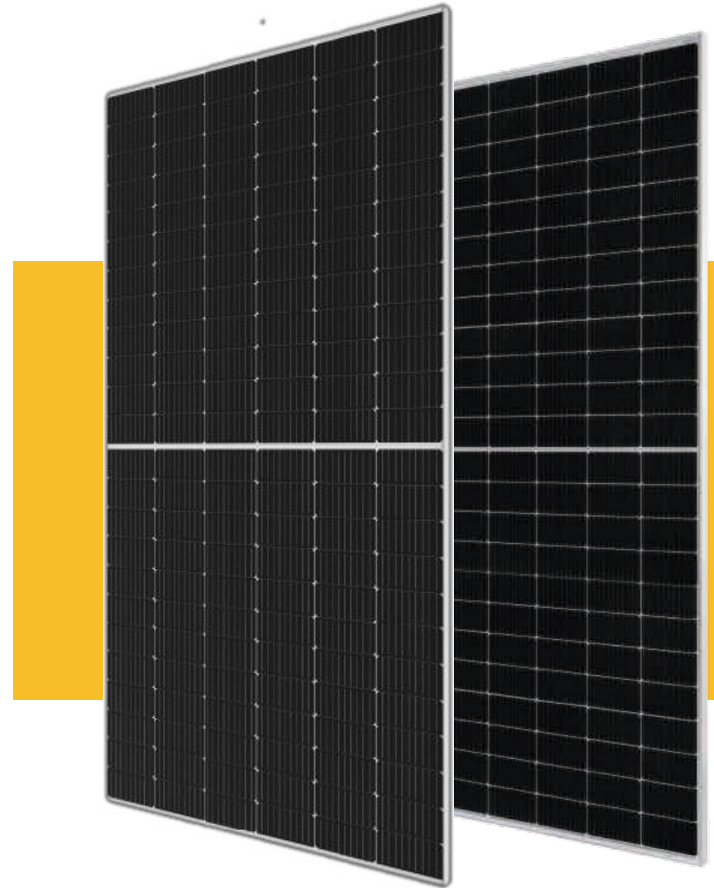
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530W-550W

KEY FEATURES

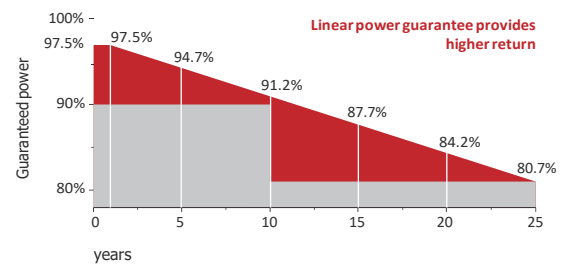
-  **Class A fire resistants (industry standard class C)**
-  Outstanding performance in low-light conditions
-  Low temperature coefficient (Pmax): -0.36 % / °C
- +5W** 0~+5W positive tolerance - to assure high output
-  Lower internal current, lower hot spot temperature
-  Cell crack risk limited in small region, enhance the module reliability
- PID FREE** Excellent anti-PID module design, TÜV SÜD certified
-  Certified to withstand high wind loads (2400pa) and snow loads (5400pa)
-  Salt mist and ammonia corrosion resistant

PRODUCT CERTIFICATES



WARRANTY

- Our linear power guarantee
- Standard linear power guarantee



15 years Enhanced product guarantee on product and workmanship

25 years Linear power output warranty

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ELECTRICAL PERFORMANCE

Electrical parameters at Standard Test Conditions (STC)

Module Type

Power output (w)	Pmax	530	535	540	545	550
Power output tolerances (w)	ΔPmax	0~+5W				
Module efficiency (%)	ηm	20.4	20.6	20.8	21.0	21.2
Voltage at Pmax (V)	Vmpp	40.8	41.0	41.2	41.4	41.6
Current at Pmax (A)	Impp	13.00	13.05	13.11	13.17	13.23
Open circuit voltage (V)	Voc	49.0	49.2	49.4	49.6	49.8
Short circuit current (A)	Isc	13.76	13.81	13.87	13.93	13.99

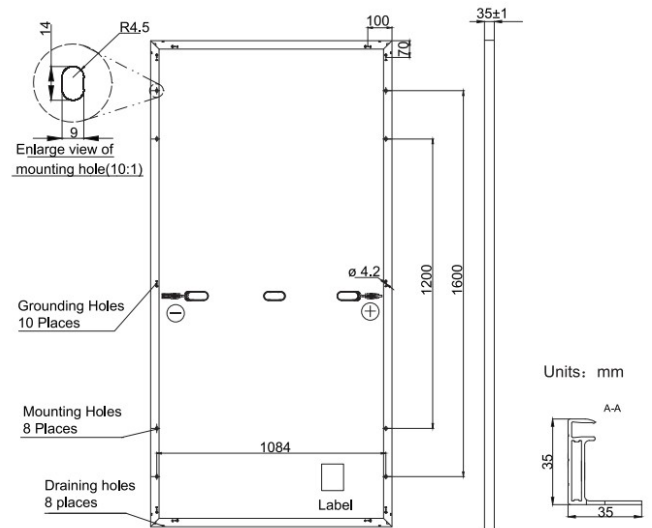
STC: 1000W/m² irradiance, 25°C cell temperature, AM1.5g spectrum according to EN 60904-3. Average relative efficiency reduction of 5% at 200W/m² according to EN 60904-1.

THERMAL CHARACTERISTICS

Nominal operating cell temperature	NOCT	°C	45 +/-2
Temperature coefficient of Pmax	γ	% / °C	-0.36
Temperature coefficient of Voc	βVoc	% / °C	-0.26
Temperature coefficient of Isc	Isc	% / °C	+0.043

OPERATING CONDITIONS

Max. System Voltage	1000V/1500V/DC (IEC)
Max. series fuse rating	25 A
Limiting reverse current	20 A
Operating temperature range	-40°C to 85°C
Max. static load, front (e.g., snow)	5400 Pa
Max. static load, back (e.g., wind)	2400 Pa
Max. hailstone impact (diameter/velocity)	25 mm / 23 m / s



MECHANICAL CHARACTERISTICS

Front Cover (material / thickness)	AR Coating tempered glass / 3.2 mm
Cell (quantity)	144pcs (6x12x2)
Encapsulant (material)	EVA
Frame material	anodized aluminum alloy
Junction box(Protection degree)	IP68 with bypass-diode
Cable (length / cross sectional area)	4 mm ² (portrait: 300 mm/landscape: 1200 mm)
Plug connector (type / protection degree)	MC4 / IP68
Fire Safety Classification (IEC 61730)	Class C

Specifications are subject to change without notice.

GENERAL CHARACTERISTICS

Dimensions	2278mm/1133mm/40mm
Weight	28.6kg
Packing Information	27pcs/Carton, 540 pcs/40HQ

