

Axpert V 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	
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	2000VA		4000VA		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	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	
SOLAR CHARGER & AC CHARGER									
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
PHYSICAL									
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								
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.

Polycrystalline 60 cells

MERCURY



5BB



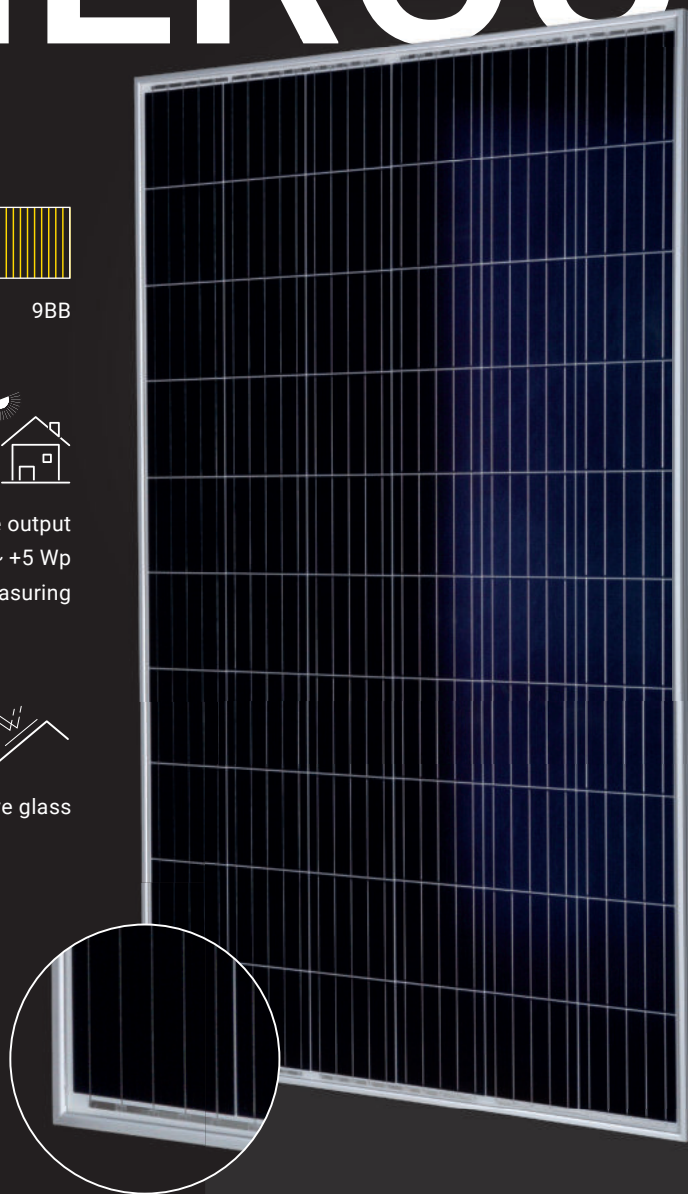
9BB



Guaranteed positive output
tolerance of 0 ~ +5 Wp
by single measuring



3.2 mm anti-reflective glass



SILVER | WHITE



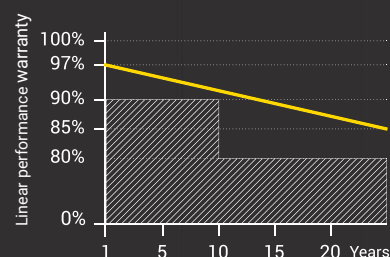
Maximum stability through
aluminium soft grip frame



Maximum 5400 Pa snow load



15 years manufacturer's warranty
25 years linear performance guarantee



OUTPUT: 285 - 300 WATT

MERCURY high efficiency polycrystalline 60 cell modules, fits all purposes from residential and commercial installations to utility scale projects. Providing a good performance under different weather conditions, MERCURY series features a 35 mm silver anodized aluminium frame, which combines robustness to light weight and a 3.2 mm anti-reflective glass which is optimizing the panel performance to solar irradiance.

Test uncertainty for Pmax: ±3 %
Voc and Isc Tolerance: ±3 %

STC	A-P285/60 [5BB]	A-P290/60 [5BB]	A-P295/60 [5BB]	A-PH30060 [9BB]
Maximum Power (Pmax) (W)	285	290	295	300
Open Circuit Voltage (Voc) (V)	38.69	38.95	39.33	39.62
Short Circuit Current (Isc) (A)	9.53	9.62	9.75	9.92
Voltage at Maximum Power (Vmpp) (V)	31.43	31.70	32.24	32.69
Current at Maximum Power (Impp) (A)	9.07	9.15	9.21	9.31
Modul Efficiency (%)	17.25	17.56	17.86	18.16

STC (Standard Testing Condition): Irradiance 1000 W/m², Cell Temperature 25 °C, Spectra at AM 1.5

Electrical Parameters at NOCT	A-P285/60 [5BB]	A-P290/60 [5BB]	A-P295/60 [5BB]	A-PH30060 [9BB]
Maximum Power (Pmax) (W)	212	216	219	225
Open Circuit Voltage (Voc) (V)	37.05	37.26	37.48	37.64
Short Circuit Current (Isc) (A)	7.56	7.64	7.71	7.82
Voltage at Maximum Power (Vmpp) (V)	29.88	30.09	30.30	30.70
Current at Maximum Power (Impp) (A)	7.10	7.18	7.25	7.36

NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², Ambient Temperature 20 °C, Spectra at AM 1.5, Wind at 1 m/s

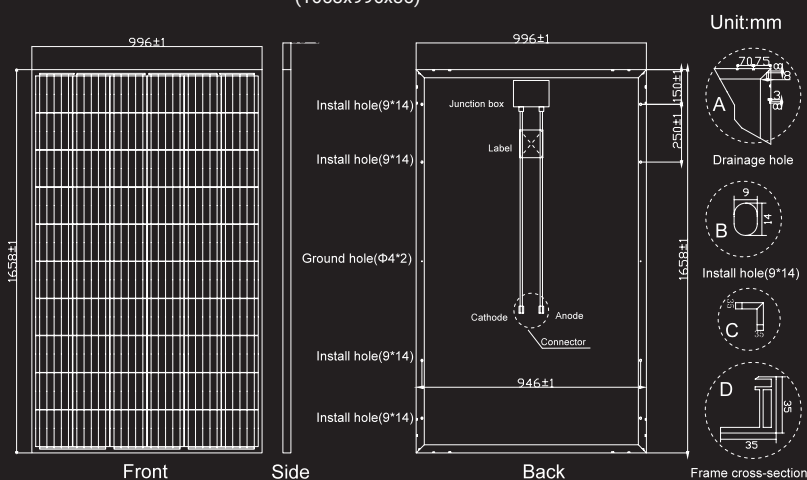
Temperature Characteristics	
Pmax Temperature Coefficients (W / °C)	-0.40 % / °C
Voc Temperature Coefficients (V / °C)	-0.33 % / °C
Isc Temperature Coefficients (A / °C)	+0.05 % / °C
Noct Nominal Operating Cell Temperature (°C)	45 ±2 °C

Operating Conditions	
Operating Module Temperature:	-40 °C ~ +85 °C
Maximum System Voltage:	1500 V
Maximum Series Fuse Rating:	20 A
Power Tolerance:	0 ~ +5 W
Maximum Static Load Front	5400 Pa tested 8000 Pa
Maximum Static Load Back	2400 Pa
Application Class	Class A

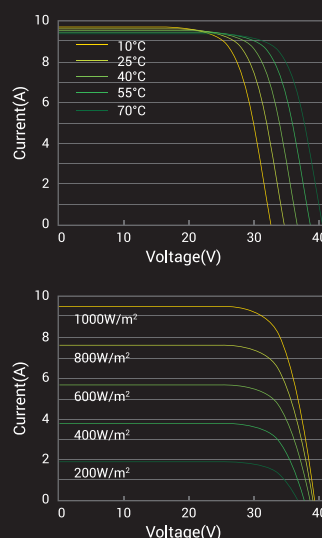
Specifications	
Cell Type	Poly G1 158.75 5BB 9BB
Weight	17.7 kg ±3 %
Dimensions	1658x996x35 mm (±2 mm)
Cable Cross Section Size	4 mm ² , cable approx 110 cm, QC4 compatible
No. of cells	60 (6x10)
Junction Box	IP67, 3 diodes
Frame	Silver anodized aluminium
Front glass	3.2 mm high transmission, low iron, tempered glass

Packing Details	
Container Type	40'HC
No. of Pallets	28
Pieces per Pallet	30
Total quantity of modules	840

(1658x996x35)



I-V Curve: (A-P290)



V3/06.2020
Due to continuous innovation and improvement, technical data are subject to change without prior notice.
Measurement tolerances: ±3 %