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Solar Panel Guide Specification Data Sheet

Jiangsu Aoxuan Photoelectric Technology Co., Ltd.

AOX-72MPRO420-440W

AOX-72MPRO-440W

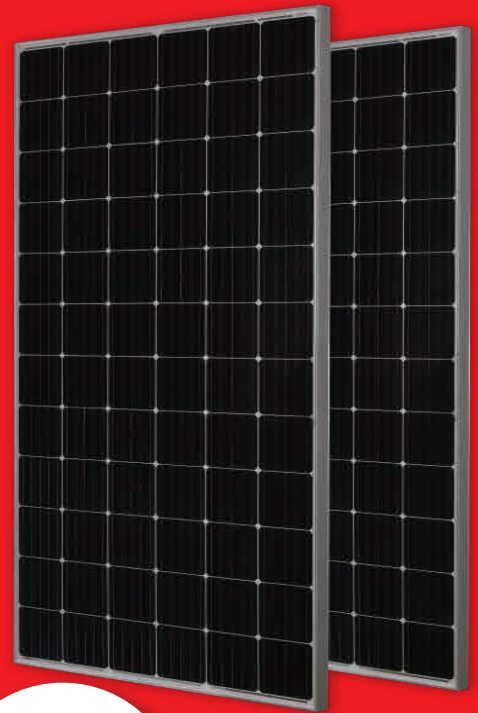
Also available on the web at

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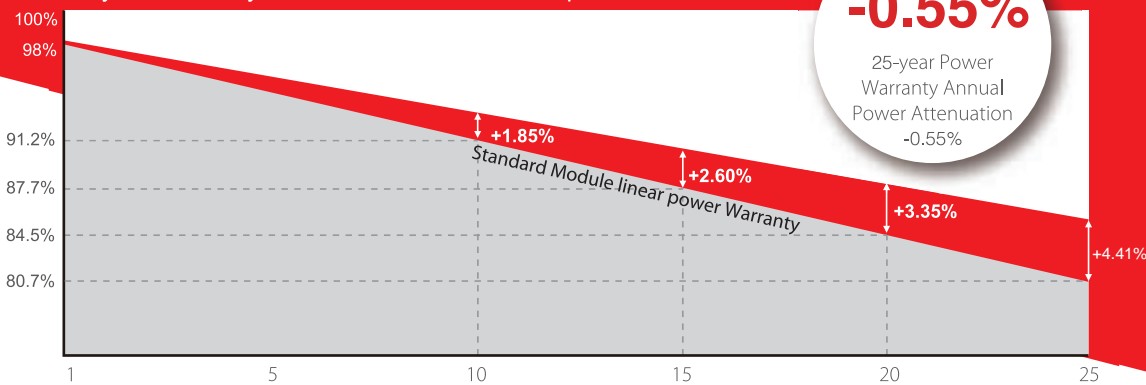
AOX-72M/PRO

420-440W Mono Module

High Efficiency
Higher Output Power
Low LID Mono PERC
Lower Temperature Coefficient
With Full Technology



10-year Warranty for Materials and Processing;
25-year Warranty for Extra Linear Power Output



Complete System and Product Certifications

IEC 61215, IEC 61730
ISO 9001:2008
ISO 14001:2004
OHSAS 18001:2007



Positive power tolerance (0 ~ +5W) guaranteed

High module conversion efficiency (up to 19.8%)

Slower power degradation enabled by Low LID Mono PERC technology: first year <2%, 0.55% year 2-25

Solid PID resistance ensured by solar cell process optimization and careful module BOM selection

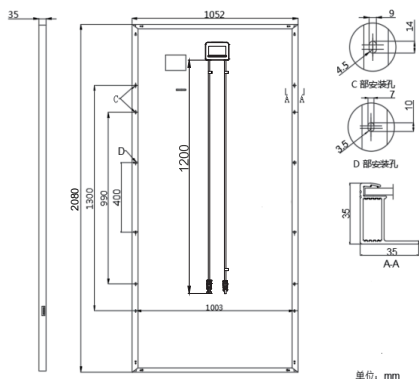
Reduced resistive loss with lower operating current

Higher energy yield with lower operating temperature

Reduced hot spot risk with optimized electrical design and lower operating current

AOX-72M/PRO 420-440W MBB

Design (mm)



Units: mm(inch)
 Tolerance:
 Length: ±2mm
 Width: ±2mm
 Height: ±1mm
 Pitch-row: ±1mm

Mechanical Parameters

Cell Orientation: 6 × 12 = 72
 Junction Box: IP68, three diodes
 Output Cable: 4mm²
 length can be customized
 Glass: Single glass
 3.2mm coated tempered glass
 Frame: Anodized aluminum alloy frame
 Weight: 23.5KG
 Dimension: 2080*1052*35mm
 Packaging: 30pcs per pallet
 280pcs per 20'GP
 726pcs per 40'HC

Operating Parameters

Operational Temperature: -40°C ~ +85°C
 Power Output Tolerance: 0 ~ +5W
 Voc and Isc Tolerance: ±3%
 Maximum System Voltage: DC1500V (IEC/UL)
 Maximum Series Fuse Rating: 20A
 Nominal Operating Cell Temperature: 45±2°C
 Safety Class: Class II
 Fire Rating: UL type 1 or type 2

Electrical Characteristics

Test uncertainty for Pmax: ±3%

Model Number	AOX-72M/PRO-420W		AOX-72M/PRO-425W		AOX-72M/PRO-430W		AOX-72M/PRO-435W		AOX-72M/PRO-440W	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	420	311.1	425	314.8	430	318.5	435	322.2	440	326.0
Open Circuit Voltage (Voc/V)	48.8	45.5	49.0	45.7	49.2	45.9	49.4	46.1	49.6	46.3
Short Circuit Current (Isc/A)	11.04	8.90	11.11	8.95	11.19	9.02	11.26	9.08	11.33	9.13
Voltage at Maximum Power (Vmp/V)	40.2	37.1	40.4	37.3	40.6	37.5	40.8	37.7	41.0	37.9
Current at Maximum Power (Imp/A)	10.45	8.38	10.52	8.44	10.60	8.50	10.67	8.56	10.74	8.61
Module Efficiency(%)	19.2		19.4		19.7		19.9		20.1	

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25°C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

Temperature Ratings (STC)

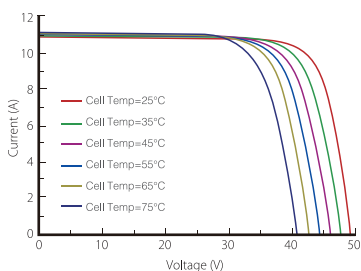
Temperature Coefficient of Isc: +0.057%/°C
 Temperature Coefficient of Voc: -0.286%/°C
 Temperature Coefficient of Pmax: -0.370%/°C

Mechanical Loading

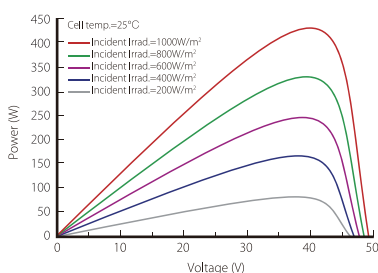
Front Side Maximum Static Loading: 5400Pa
 Rear Side Maximum Static Loading: 2400Pa
 Hailstone Test: 25mm Hailstone at the speed of 23m/s

I-V Curve

Current-Voltage Curve(AOX-72M/PRO-430W)



Power-Voltage Curve(AOX-72M/PRO-430W)



Current-Voltage Curve(AOX-72M/PRO-430W)

