



N-Type ABC Black Hole Series

AIKO-A-MAH72Mb

Up to **23.8%**
595W-615W



Product
Warranty



Performance
Warranty



reddot winner 2023

Full Black Design

No grid lines on the front

Higher Power Output

Higher efficiency: 23.8%

Lower degradation: 1 Year \leq 1.0%, 2 -30 Year \leq 0.35%

Better Temperature Coefficient: $-0.29\%/^{\circ}\text{C}$

Optimized Balance of System (BOS)

Significant savings on mounting structure, cabling, and labour cost

Complete Set of Quality Management System

IEC 61730 (2016) IEC 61215 (2021)

ISO 9001:2015 Quality Management System

ISO 14001:2015 Environmental Management System

ISO 45001:2018 Occupational Safety and Management System

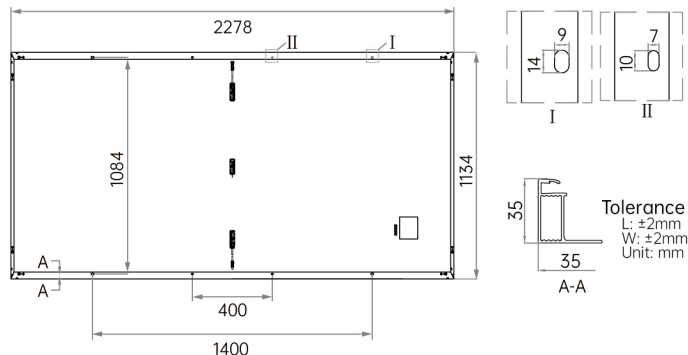
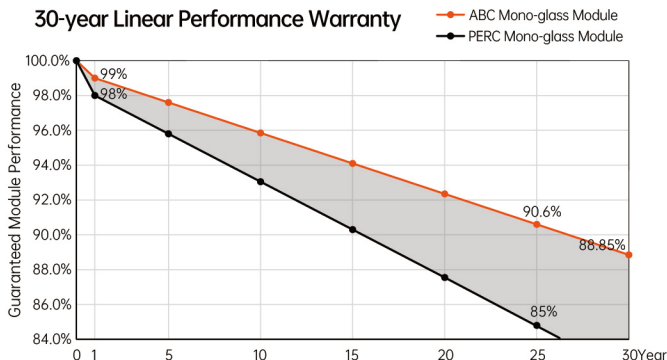


615W
Output

23.8%
Efficiency

≤1%
First-year Degradation

≤0.35%
Annual Degradation from Year 2-30



Electrical Characteristics (STC: AM1.5 1000W/m ² 25°C NOCT: AM1.5 800W/m ² 20°C 1m/s)		Power Tolerance: 0~ + 3%		Max Power Test Uncertainty: ±3%						
Model	AIKO-A595-MAH72Mb		AIKO-A600-MAH72Mb		AIKO-A605-MAH72Mb		AIKO-A610-MAH72Mb		AIKO-A615-MAH72Mb	
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P _{max} [W]	595	449	600	453	605	456	610	460	615	464
V _{oc} [V]	53.39	50.28	53.49	50.38	53.59	50.47	53.69	50.56	53.79	50.66
V _{mp} [V]	44.91	42.30	45.01	42.39	45.11	42.48	45.21	42.58	45.31	42.67
I _{sc} [A]	13.73	11.13	13.79	11.18	13.85	11.23	13.91	11.28	13.97	11.33
I _{mp} [A]	13.25	10.62	13.34	10.69	13.42	10.75	13.50	10.82	13.58	10.88
Module Efficiency	23.0%		23.2%		23.4%		23.6%		23.8%	

Mechanical Specification	
Cell Type	Mono-crystalline Silicon
Front Cover	3.2 mm tempered glass, with anti-reflection coating
Frame	Black anodized aluminum
Cable	4mm ² (IEC) 12AWG(UL) 350mm or Customized Length
No. of Cells	144(6*24)
Junction Box	IP68, three bypass diodes
Connector	MC4 compatible
Weight	28.2kg±3%
Dimension	2278*1134*35mm
Package Detail	31pcs per pallet/155 pcs per 20' GP/620pcs per 40' HQ

Temperature Ratings (STC)	
Temperature Coefficient of I _{sc}	+ 0.05%/ °C
Temperature Coefficient of V _{oc}	- 0.24%/ °C
Temperature Coefficient of P _{max}	- 0.29%/ °C

Installation Guide	
Operation Temperature	- 40°C~+85°C
Maximum Series Fuse Rating	25A
Protection Class	Class II
V _{oc} and I _{sc} Tolerance	±3%
Maximum System Voltage	DC1500V
Maximum Static Loading	Front 5400Pa Back 2400Pa
Hail Test	25 mm diameter hail at 23 m/s
Fire Rating	IEC Class C

