



N-Type ABC Dual-glass Module

AIKO-A-MAH54D

Up to **23.8%**
440W-465W



Product Warranty
Extendable to 25yrs*



**Performance
Warranty**



reddot winner 2023

Premium Appearance

No grid lines on the front

Higher Power Output

Higher efficiency: 23.6%

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

Better temperature coefficient: $-0.26\%/^{\circ}\text{C}$

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

(Made in China)



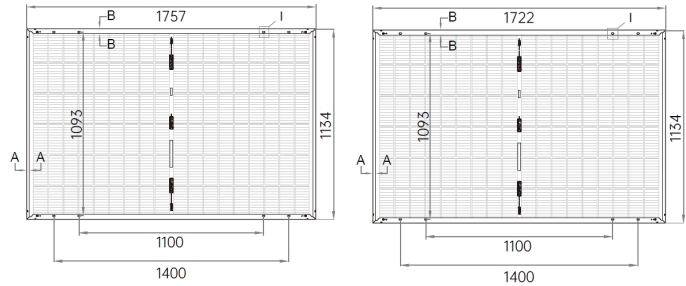
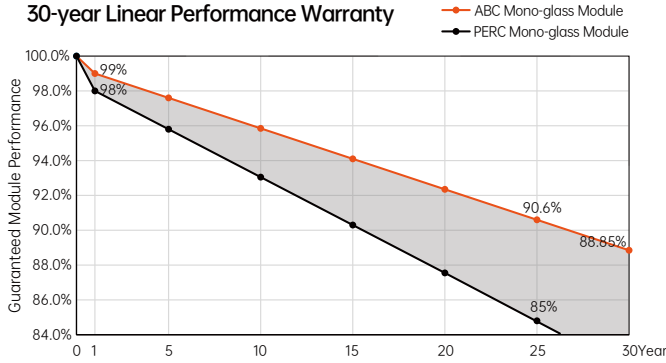
465W
Output

23.8%
Efficiency

≤1%
First-year Degradation

≤0.35%
Annual Degradation from Year 2-30

30-year Linear Performance Warranty



Tolerance
L: ±2mm
W: ±2mm
Unit: mm

Electrical Characteristics (STC: AM1.5 1000W/m² 25°C NOCT: AM1.5 800W/m² 20°C 1m/s) Voc=97% Isc=38% Pmax=39% Power Tolerance:±3%

Model	AIKO-A440-MAH54Dw		AIKO-A445-MAH54Dw		AIKO-A450-MAH54Dw		AIKO-A455-MAH54Dw		AIKO-A460-MAH54Dw		AIKO-A465-MAH54Dw	
	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
P _{max} [W]	440	460	445	465	450	470	455	475	460	480	465	485
V _{oc} [V]	40.41	40.42	40.51	40.52	40.61	40.62	40.71	40.72	40.81	40.82	40.91	40.92
V _{mp} [V]	33.40	33.43	33.50	33.53	33.60	33.63	33.70	33.73	33.80	33.83	33.90	33.93
I _{sc} [A]	13.94	14.53	14.04	14.63	14.14	14.73	14.24	14.83	14.34	14.93	14.44	15.03
I _{mp} [A]	13.18	13.77	13.29	13.87	13.40	13.98	13.51	14.09	13.62	14.20	13.72	14.30
Module Efficiency	22.1%/22.5%		22.3%/22.8%		22.6%/23.1%		22.8%/23.3%		23.1%/23.6%		23.3%/23.8%	

Mechanical Specification

Cell Type	N-Type ABC
Glass	Dual glass, 2.0+2.0mm coated semi tempered glass
Frame	Anodized aluminum
Cable	4mm ² (IEC) 12AWG(UL) 350mm or Customized Length
No. of Cells	108(6*18)
Junction Box	IP68, three bypass diodes
Connector	MC4 EVOA/MC4 EVO2
Weight	24.5/24.0kg±3%
Dimension	1757*1134*30/35/40mm. 1722*1134*30/35/40mm
Package Detail	36pcs per pallet/216 pcs per 20' GP/936pcs per 40' HQ

Temperature Ratings (STC)

Temperature Coefficient of I _{sc}	+ 0.05%/ °C
Temperature Coefficient of V _{oc}	- 0.22%/ °C
Temperature Coefficient of P _{max}	- 0.26%/ °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