AIKO

N-Type ABC
Dual-glass Module

AIKO-A-MAH54Dw

Up to 23.6%
445W-460W



15 year Product Warranty

30 year Performance Warranty

reddot winner 2023

Premium Appearance

No grid lines on the front

Higher Power Output

Higher efficiency: 23.6%
Lower degradation: 1 Year⩽1.0%, 2 -30 Year⩽0.35%
Better Temperature Coefficient: -0.29%/ ℃

Optimized Balance of System (BOS)

Significant savings on mounting structure, cabling, and labour cost

Complete Set of Quality Management System

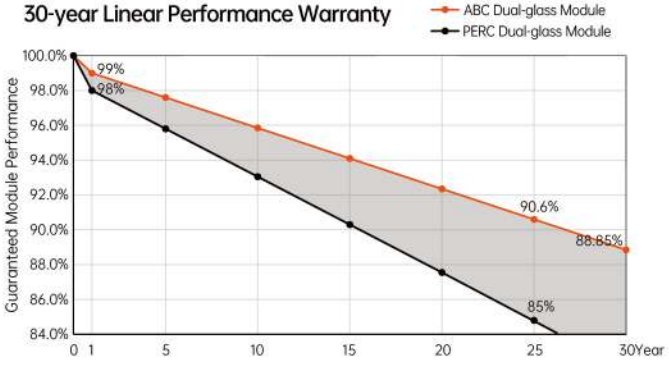
IEC 61730 (2016) IEC 61215 (2021)
ISO 9001:2015 Quality Management System
ISO 14001:2015 Environmental Management System
ISO 45001:2018 Occupational Safety and Management System

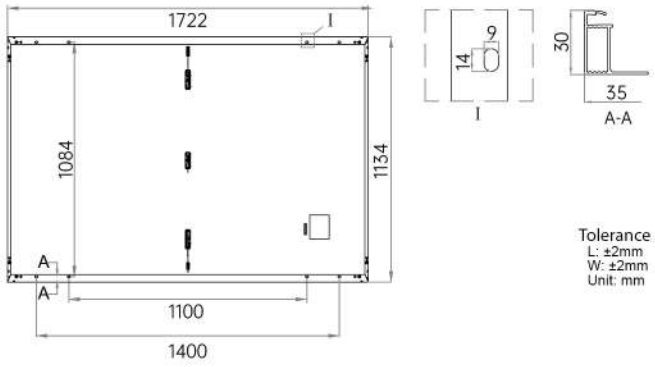
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N-Type ABC Dual-glass Module

AIKO-A-MAH54Dw

460W	23.6%	⩽1%	⩽0.35%
Output	Efficiency	First-year Degradation	Annual Degradation from Year 2-30





Tolerance
L: ±2mm
W: ±2mm
Unit: mm

Electrical Characteristics (STC: AM1.5 1000W/m² 25℃ NOCT: AM1.5 800W/m² 20℃ 1m/s) Power Tolerance:0~ + 3% Max Power Test Uncertainty:±3%

Model	AIKO-A445-MAH54Dw		AIKO-A450-MAH54Dw		AIKO-A455-MAH54Dw		AIKO-A460-MAH54Dw	
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P_{max} [W]	445	336	450	339	455	343	460	347
V_{oc} [V]	39.95	37.63	40.05	37.72	40.15	37.82	40.25	37.91
V_{mp} [V]	33.59	31.64	33.69	31.73	33.79	31.83	33.89	31.92
I_{sc} [A]	13.81	11.20	13.87	11.25	13.93	11.29	13.99	11.34
I_{mp} [A]	13.25	10.62	13.36	10.71	13.47	10.79	13.58	10.88
Module Efficiency	**22.8%**		**23.0%**		**23.3%**		**23.6%**	

Mechanical Specification

Cell Type	Mono-crystalline Silicon
Glass	Dual glass,1.6+1.6mm/2.0+2.0mm coated semi tempered glass
Frame	Anodized aluminum
Cable	4mm²(IEC) 12AWG(UL) 350mm or Customized Length
No. of Cells	108(6*18)
Junction Box	IP68, three bypass diodes
Connector	MC4 compatible
Weight	21.0/24.0kg±3%
Dimension	1722*1134*30mm
Package Detail	36pcs per pallet/216 pcs per 20' GP/936pcs per 40' HQ

Temeprature 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℃-+85℃
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

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*Aiko Energy reserves right to update the specification without notice

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