AIKO

N-Type ABC
Dual-glass Module
AIKO-A-MAH54Db

Up to **23.3**%
440W-455W

15 year
Product Warranty

30 year
Performance Warranty

reddot winner 2023

Full Black Design
No grid lines on the front

Higher Power Output
Higher efficiency: 23.3%
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
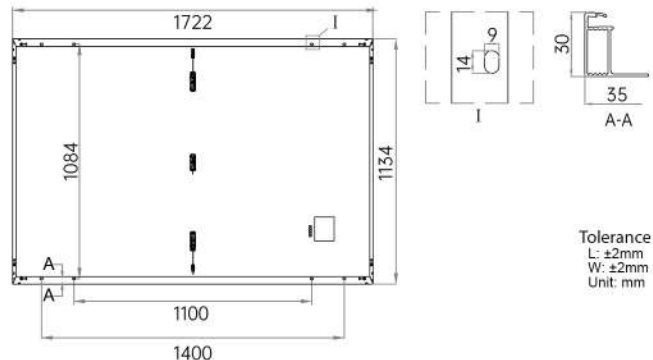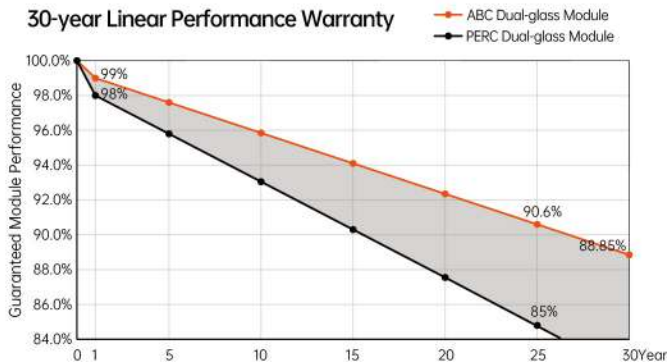ISO 45001:2018 Occupational Safety and Management System

CE   TÜVRheinland

N-Type ABC Dual-glass Module

AIKO-A-MAH54Db

455W	23.3%	≤1%	≤0.35%
Output	Efficiency	First-year Degradation	Annual Degradation from Year 2-30

30-year Linear Performance Warranty

- ABC Dual-glass Module
- PERC Dual-glass Module

Dimension drawing: 1722, 1084, 1134, 1100, 1400, 14, 9, 30, 35, A-A

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-A440-MAH54Db		AIKO-A445-MAH54Db		AIKO-A450-MAH54Db		AIKO-455-MAH54Db	
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P_{max} [W]	440	332	445	336	450	339	455	343
V_{oc} [V]	40.05	37.72	40.15	37.82	40.25	37.91	40.35	38.00
V_{mp} [V]	33.69	31.73	33.79	31.83	33.89	31.92	33.99	32.01
I_{sc} [A]	13.54	10.98	13.60	11.03	13.66	11.08	13.72	11.13
I_{mp} [A]	13.07	10.47	13.18	10.56	13.28	10.65	13.39	10.73
Module Efficiency	22.5%		22.8%		23.0%		23.3%	

Mechanical Specification

Cell Type	Mono-crystalline Silicon
Glass	Dual glass,1.6+1.6mm/2.0+2.0mm coated semi tempered glass
Frame	Black 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

Temerature 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