



N-Type ABC Mono-glass Module

AIKO-A-MAH54Mw

Up to **23.8%**
450W-465W



Product
Warranty



Performance
Warranty



red dot winner 2023

Premium Appearance

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

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



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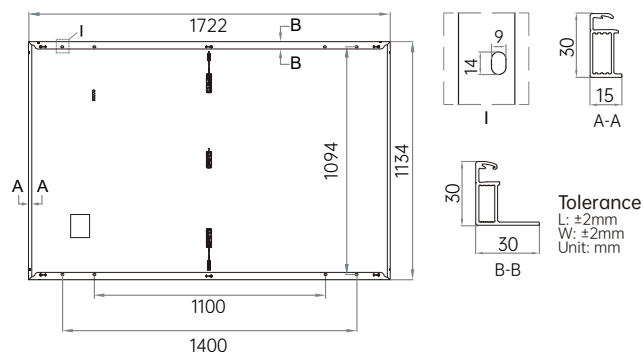
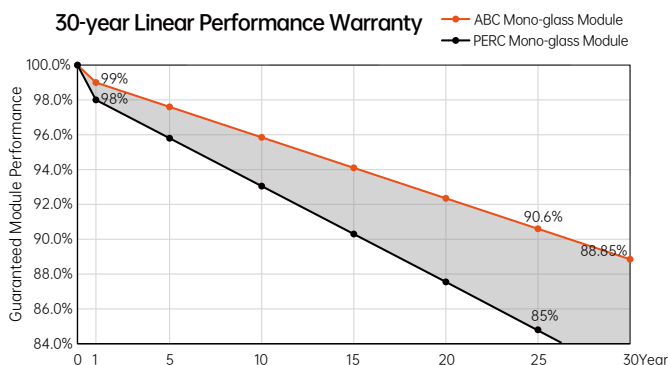
AIKO-A-MAH54Mw

465W
Output

23.8%
Efficiency

≤1%
First-year Degradation

≤0.35%
Annual Degradation from Year 2-30



Electrical Characteristics (STC: AM1.5 1000W/m² 25°C NOCT: AM1.5 800W/m² 20°C 1m/s)

Power Tolerance: 0~+3%

Model	AIKO-A450-MAH54Mw		AIKO-A455-MAH54Mw		AIKO-A460-MAH54Mw		AIKO-A465-MAH54Mw	
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P _{max} [W]	450	339	455	343	460	346	465	350
V _{oc} [V]	40.49	38.24	40.59	38.33	40.69	38.43	40.79	38.52
V _{mp} [V]	33.50	31.64	33.60	31.73	33.70	31.83	33.80	31.92
I _{sc} [A]	14.21	11.49	14.31	11.57	14.41	11.66	14.51	11.74
I _{mp} [A]	13.44	10.72	13.55	10.81	13.66	10.90	13.76	10.98
Module Efficiency	23.1%		23.3%		23.6%		23.8%	

Mechanical Specification

Cell Type	N-Type ABC
Front Cover Mono glass	3.2 mm tempered glass
Frame	Black anodized aluminum
Cable	4mm ² (IEC) 12AWG(UL) 1200mm or Customized Length
No. of Cells	108(6*18)
Junction Box	IP68, three bypass diodes
Connector	MC4 compatible/MC4 EVO2
Weight	21.2kg±3%
Dimension	1722*1134*30mm
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



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*AIKO Energy reserves right to update the specification without notice
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