



N-Type ABC Neostar Series

AIKO-A-MAH54Db

Up to **23.1%**
445W-460W



Product
Warranty



Performance
Warranty



Full Black Design

No grid lines on the front

Higher Power Output

Higher efficiency: 23.1%

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

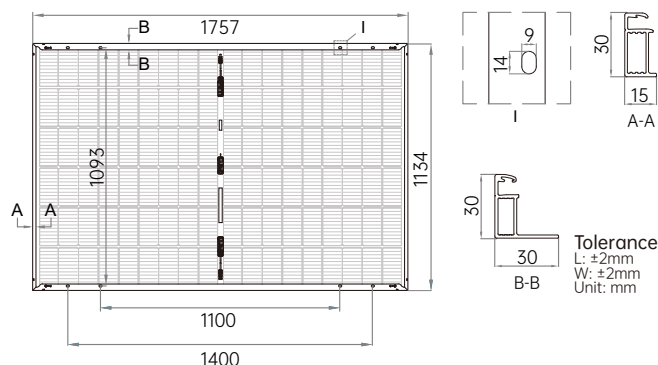
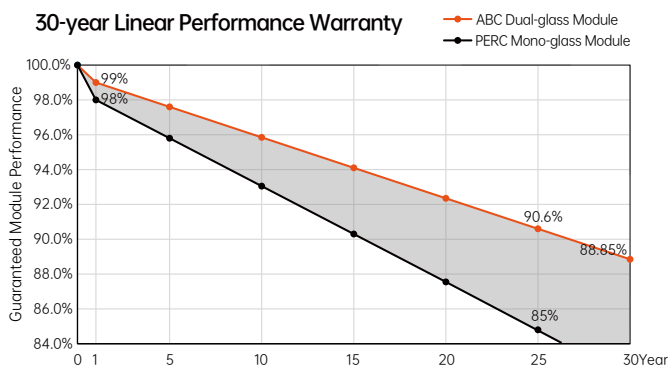
ISO 45001:2018 Occupational Safety and Management System

* The 25 years product warranty applies to Europe

460W
Output

23.1%
Efficiency

 $\leq 1\%$
First-year Degradation

 $\leq 0.35\%$
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-A445-MAH54Db		AIKO-A450-MAH54Db		AIKO-A455-MAH54Db		AIKO-460-MAH54Db	
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P_{max} [W]	445	335	450	339	455	343	460	346
V_{oc} [V]	40.71	38.44	40.81	38.54	40.93	38.65	41.06	38.78
V_{mp} [V]	33.70	31.83	33.80	31.92	33.90	32.01	34.00	32.11
I_{sc} [A]	13.95	11.28	14.05	11.36	14.15	11.44	14.25	11.52
I_{mp} [A]	13.21	10.54	13.32	10.63	13.43	10.72	13.54	10.80
Module Efficiency	22.3%		22.6%		22.8%		23.1%	

Mechanical Specification

Cell Type	N-Type ABC
Glass	Dual glass, 2.0+2.0mm coated semi 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 EVO2
Weight	24.5kg±3%
Dimension	1757*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