



# N-Type ABC Neostar Series

AIKO-A-MAH54Mb

Up to **23.3%**  
**445W-465W**



Product  
Warranty



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  $\leq 1.0\%$ , 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

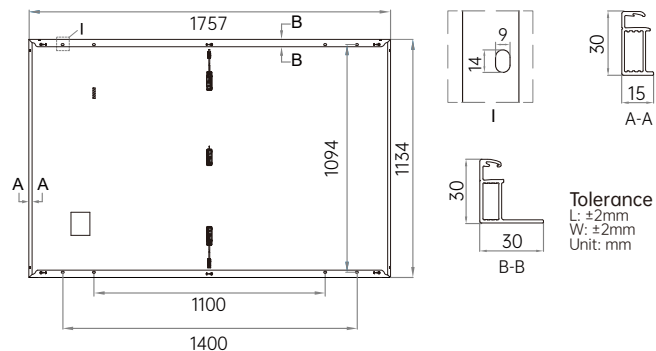
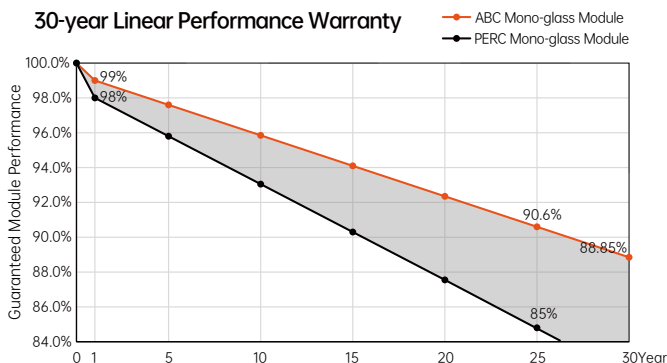


**465W**  
Output

**23.3%**  
Efficiency

**≤1%**  
First-year Degradation

**≤0.35%**  
Annual Degradation from Year 2-30



Electrical Characteristics (STC: AM1.5 1000W/m <sup>2</sup> 25°C NOCT: AM1.5 800W/m <sup>2</sup> 20°C 1m/s)										Power Tolerance: 0~ + 3%	
Model	AIKO-A445-MAH54Mb		AIKO-A450-MAH54Mb		AIKO-A455-MAH54Mb		AIKO-A460-MAH54Mb		AIKO-A465-MAH54Mb		
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
P <sub>max</sub> [W]	445	335	450	339	455	343	460	346	465	350	
V <sub>oc</sub> [V]	40.59	38.33	40.69	38.43	40.79	38.52	40.89	38.62	40.99	38.71	
V <sub>mp</sub> [V]	33.60	31.73	33.70	31.83	33.80	31.92	33.90	32.02	34.00	32.11	
I <sub>sc</sub> [A]	14.02	11.33	14.12	11.42	14.22	11.50	14.32	11.58	14.42	11.66	
I <sub>mp</sub> [A]	13.25	10.57	13.36	10.66	13.47	10.75	13.57	10.83	13.68	10.92	
<b>Module Efficiency</b>	<b>22.3%</b>		<b>22.6%</b>		<b>22.9%</b>		<b>23.1%</b>		<b>23.3%</b>		

Mechanical Specification	
Cell Type	N-Type ABC
Front Cover Mono glass	3.2 mm tempered glass
Frame	Black anodized aluminum
Cable	4mm <sup>2</sup> (IEC) 12AWG(UL) 1200mm or Customized Length
No. of Cells	108(6*18)
Junction Box	IP68, three bypass diodes
Connector	MC4 EVO2
Weight	21.5kg±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 <sub>sc</sub>	+ 0.05%/ °C
Temperature Coefficient of V <sub>oc</sub>	- 0.22%/ °C
Temperature Coefficient of P <sub>max</sub>	- 0.26%/ °C

Installation Guide	
Operation Temperature	- 40°C~+85°C
Maximum Series Fuse Rating	25A
Protection Class	Class II
V <sub>oc</sub> and I <sub>sc</sub> 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