



# N-Type ABC Neostar Series

AIKO-A-MAH54Mw

Up to **23.6%**  
**450W-470W**



Product  
Warranty



Performance  
Warranty



reddot winner 2023

## Premium Appearance

No grid lines on the front

## Higher Power Output

Higher efficiency: 23.6%

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



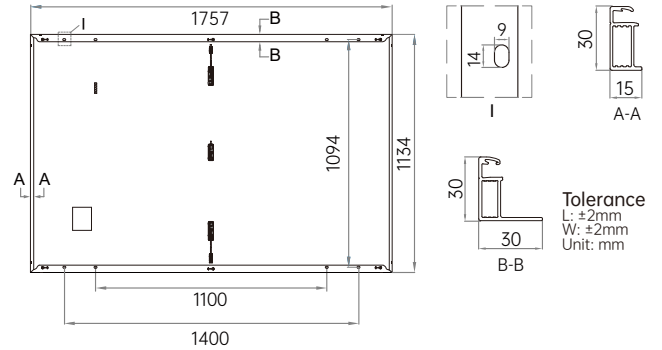
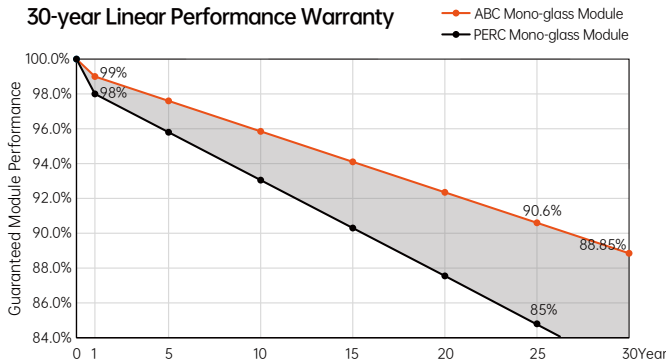
**470W**  
Output

**23.6%**  
Efficiency

**≤1%**  
First-year Degradation

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

### 30-year Linear Performance Warranty



### 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-A450-MAH54Mw		AIKO-A455-MAH54Mw		AIKO-A460-MAH54Mw		AIKO-A465-MAH54Mw		AIKO-A470-MAH54Mw	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
$P_{max}$ [W]	450	339	455	343	460	346	465	350	470	354
$V_{oc}$ [V]	40.49	38.24	40.59	38.33	40.69	38.43	40.79	38.52	40.89	38.62
$V_{mp}$ [V]	33.50	31.64	33.60	31.73	33.70	31.83	33.80	31.92	33.90	32.02
$I_{sc}$ [A]	14.21	11.49	14.31	11.57	14.41	11.66	14.51	11.74	14.61	11.82
$I_{mp}$ [A]	13.44	10.72	13.55	10.81	13.66	10.90	13.76	10.98	13.87	11.07
<b>Module Efficiency</b>	<b>22.6%</b>		<b>22.8%</b>		<b>23.1%</b>		<b>23.3%</b>		<b>23.6%</b>	

### Mechanical Specification

Cell Type	N-Type ABC
Front Cover	3.2 mm tempered glass
Mono 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 compatible/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 $I_{sc}$	+ 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