



N-Type ABC

Neostar Series

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

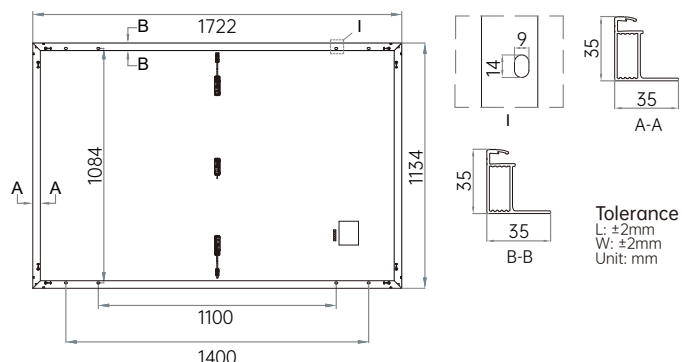
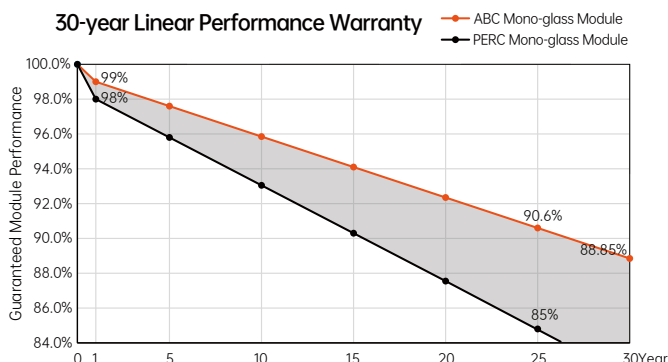
IEC 61730 (2016) IEC 61215 (2021)

ISO 9001:2015 Quality Management System

ISO 14001:2015 Environmental Management System

ISO 45001:2018 Occupational Safety and Management System



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	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P _{max} [W]	450	339	455	343	460	346	465	350
V _{oc} [V]	40.50	38.25	40.60	38.34	40.70	38.44	40.80	38.53
V _{mp} [V]	33.50	31.63	33.60	31.73	33.70	31.82	33.80	31.92
I _{sc} [A]	14.13	11.43	14.19	11.48	14.25	11.53	14.31	11.57
I _{mp} [A]	13.44	10.73	13.55	10.81	13.66	10.90	13.77	10.98
Module Efficiency	23.0%		23.3%		23.6%		23.8%	

Mechanical Specification

Cell Type	N-Type ABC
Front Cover Mono glass	3.2 mm tempered glass
Frame	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	21.6kg±3%
Dimension	1722*1134*35mm
Package Detail	31pcs per pallet/186 pcs per 20' GP/806pcs 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