



Neostar 2S

ABC N-Type

Mono-Glass Model

Up to **23.1%**
440W-460W



Product
Warranty



Performance
Warranty



reddot winner 2023

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

Shading Unique Optimization

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

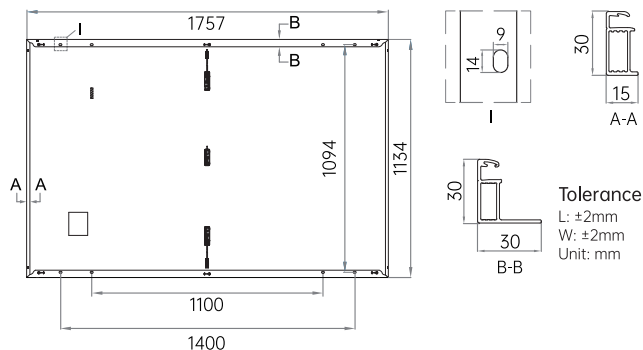
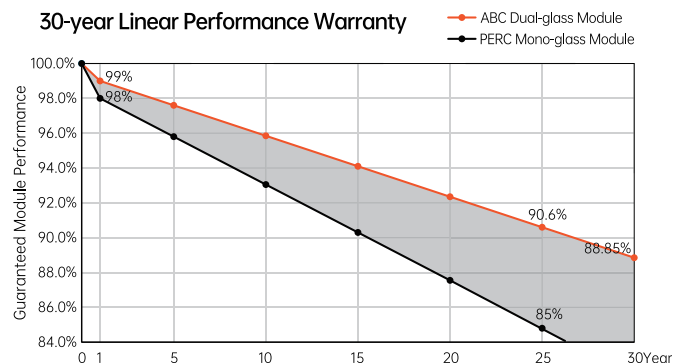


460W
Output

23.1%
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-A440-MAH54Mb		AIKO-A445-MAH54Mb		AIKO-A450-MAH54Mb		AIKO-A455-MAH54Mb		AIKO-A460-MAH54Mb	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P _{max} [W]	440	331	445	335	450	339	455	343	460	346
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]	13.91	11.25	14.02	11.33	14.12	11.42	14.22	11.50	14.32	11.58
I _{mp} [A]	13.14	10.49	13.25	10.57	13.36	10.66	13.47	10.75	13.57	10.83
Module Efficiency	22.1%		22.3%		22.6%		22.8%		23.1%	

Mechanical Specification

Cell Type	N-Type ABC
Front Cover	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 (Original)
Weight	21.5kg±3%
Dimension	1757*1134*30mm
Package Detail	36pcs per pallet/216 pcs per 20' GQ/864pcs 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

