AIKO

Neostar 1S+

ABC N-Type

Dual-Glass Model



Up to 23.3%
435W-455W

25 year
Product Warranty

30 year
Performance Warranty

TIER 1 BloombergNEF

inter solar award 2023 WINNER

reddot winner 2023

Full Black Design

No front grid lines

Higher Power Output

Higher efficiency: 23.3%
Lower degradation: 1styear≤1.0%, Linear Degradation≤0.35%
Better temperature coefficient: -0.26%/ ℃

Optimized Balance of System (BOS)

Significant savings on mounting structure, cabling, and labour cos

Warranty partner

Munich RE

Complete Set of Quality Management System

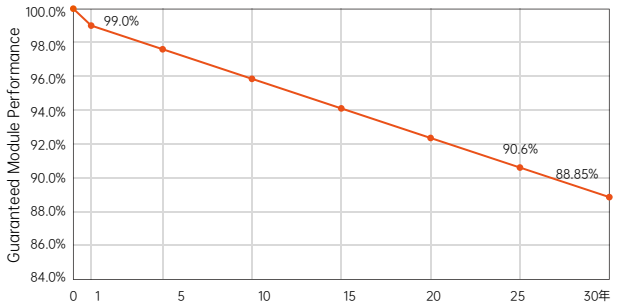
IEC 61730 (2016) IEC 61215 (2021)
ISO 9001:2015 Quality Management System
ISO 14001:2015 Environmental Management System
ISO 45001:2018 Occupational Safety and Management System

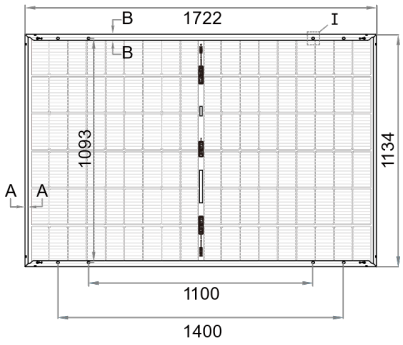
Neostar 1S+

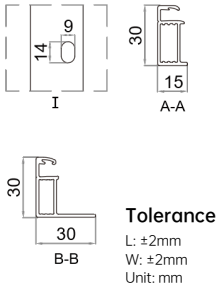
AIKO-A-MAH54Mb

455W	23.3%	≤1%	≤0.35%
Output	Efficiency	First-year Degradation	Annual Degradation from Year 2-30

30-year Linear Performance Warranty







Tolerance
L: ±2mm
W: ±2mm
Unit: mm

Electrical Characteristics (STC: AM1.5 1000W/m² 25℃ NOCT: AM1.5 800W/m² 20℃ 1m/s) Power Tolerance:: 0~ + 3%

Model	AIKO-A435-MAH54Mb		AIKO-A440-MAH54Mb		AIKO-A445-MAH54Mb		AIKO-A450-MAH54Mb		AIKO-A455-MAH54Mb	
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Pmax [W]	435	331	440	331	445	335	450	339	455	343
Voc [V]	40.51	38.35	40.61	38.35	40.71	38.44	40.81	38.54	40.93	38.65
Vmp [V]	33.50	31.73	33.60	31.73	33.70	31.83	33.80	31.92	33.90	32.01
Isc [A]	13.75	11.20	13.85	11.20	13.95	11.28	14.05	11.36	14.15	11.44
Imp [A]	12.99	10.46	13.10	10.46	13.21	10.54	13.32	10.63	13.43	10.72
Module Efficiency	**22.3%**		**22.5%**		**22.8%**		**23.0%**		**23.3%**	

Mechanical Specification

Cell Type	N-Type ABC
Front Cover Mono glass	Dual glass, 2.0 + 2.0mm coated semi tempered glass
Frame	Black anodized aluminum
Cable	4mm²(IEC) 12AWG(UL) ±1200mm
No. of Cells	108(6*18)
Junction Box	IP68, 3 bypass diodes
Connector	Original MC4
Weight	24.2kg
Dimension	1722*1134*30mm
Package Detail	36pcs per pallet / 216pcs per 20'GP / 936pcs per 40'HC

Temperature Ratings (STC)

Temperature Coefficient of Isc	+ 0.05%/ ℃
Temperature Coefficient of Voc	- 0.22%/ ℃
Temperature Coefficient of Pmax	- 0.26%/ ℃

Installation Guide

Operation Temperature	-40℃ - +85℃
Maximum Series Fuse Rating	25A
Protection Class	Class II
Voc and Isc 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 A

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*AIKO reserves right to update the specification without notice

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