



Neostar 1P

ABC N-Type

Mono-Glass Model

Up to **23.6%**
445W-460W



Product
Warranty



Performance
Warranty



reddot winner 2023

Partial Shading Optimisation

Premium Appearance

No grid lines on the front

Higher Power Output

Higher efficiency: 23.6%

Lower degradation: 1 year \leq 1.0%, Linear Degradation \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

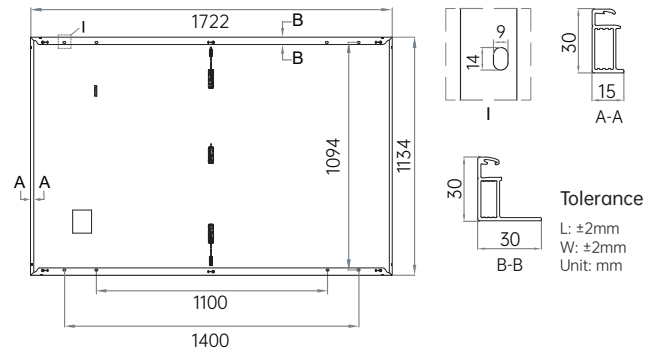
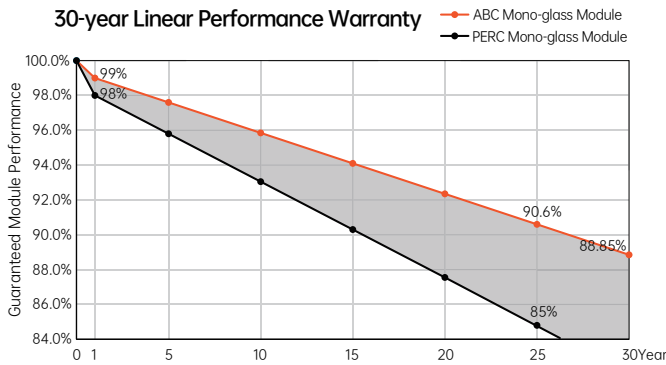
ISO 45001:2018 Occupational Safety and Management System

460W
Output

23.6%
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-A445-MAH54Mw		AIKO-A450-MAH54Mw		AIKO-A455-MAH54Mw		AIKO-A460-MAH54Mw	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P _{max} [W]	445	335	450	339	455	343	460	346
V _{oc} [V]	40.39	38.14	40.49	38.24	40.59	38.33	40.69	38.43
V _{mp} [V]	33.40	31.55	33.50	31.64	33.60	31.73	33.70	31.83
I _{sc} [A]	14.11	11.41	14.21	11.49	14.31	11.57	14.41	11.66
I _{mp} [A]	13.33	10.63	13.44	10.72	13.55	10.81	13.66	10.90
Module Efficiency	22.8%		23.0%		23.3%		23.6%	

Mechanical Specification

Cell Type	N-Type ABC
Front Cover Mono glass	3.2 mm tempered glass
Frame	Black anodized aluminum
Cable	4mm ² (IEC) 12AWG(UL) 1200mm
No. of Cells	108(6*18)
Junction Box	IP68,3 bypass diodes
Connector	MC4-Evo2
Weight	20.5kg
Dimension	1722*1134*30mm
Package Detail	36pcs per pallet / 216pcs per 20'GP / 936pcs per 40' HC

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

