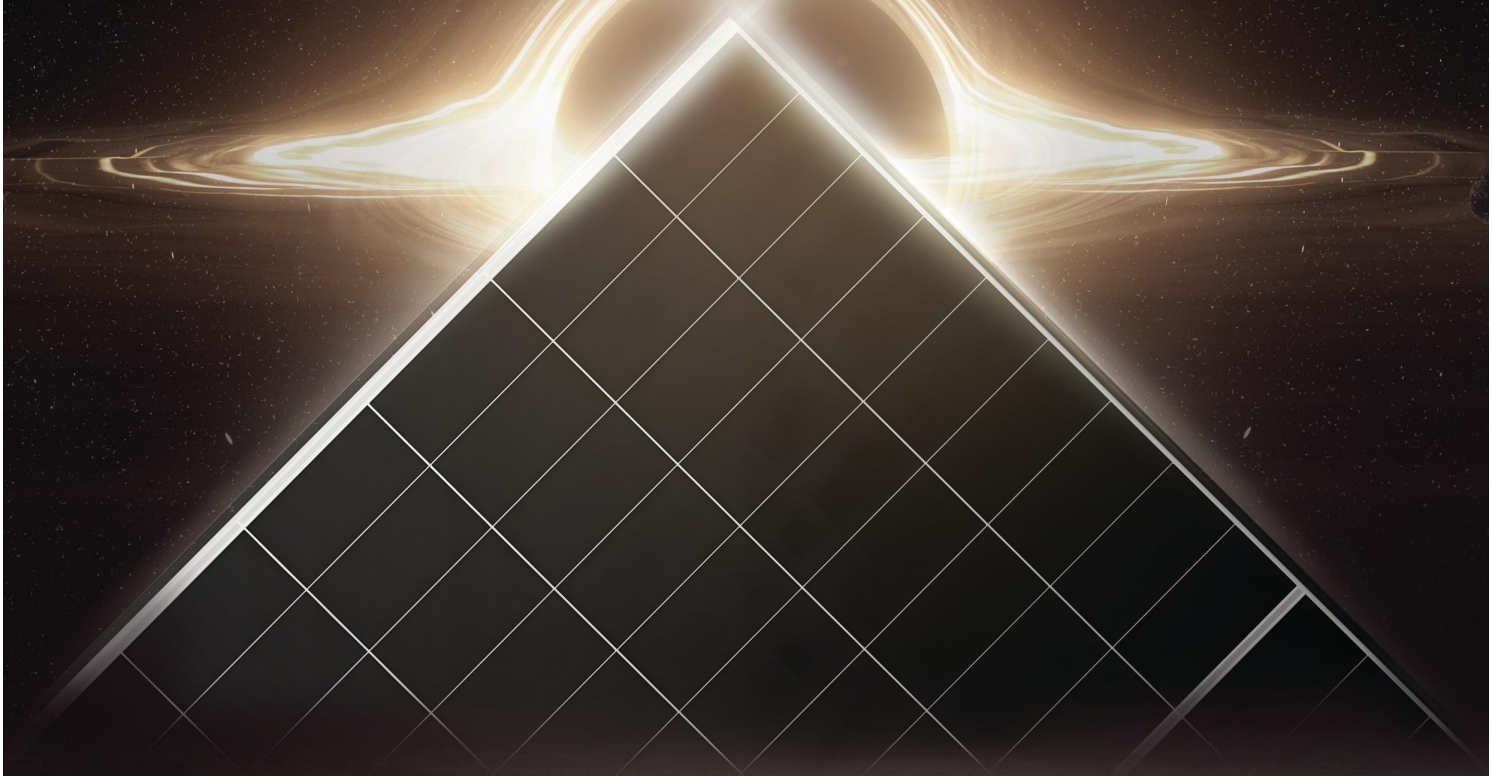
AIKO

NEOSTAR

2P Mono-Glass Module

450W-485W



Technical Features:

- Partial Shading Optimisation
- Better Temperature Coefficient
- High Temperature Restriction
- Micro-crack Resistance
- Higher Power
- Lower BOS
- More Aesthetic Values

TIER 1 BloombergNEF

ESG Innovation Award 2023/24

inter Solar award 2023 WINNER

reddot winner 2023

15 year Product Warranty Extendable to 25years*

30 year Performance Warranty

CE

TÜVRheinland

Warranty partner

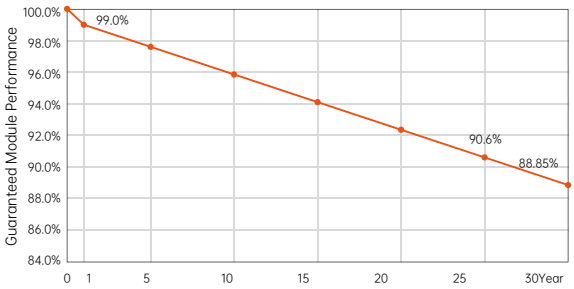
Munich RE

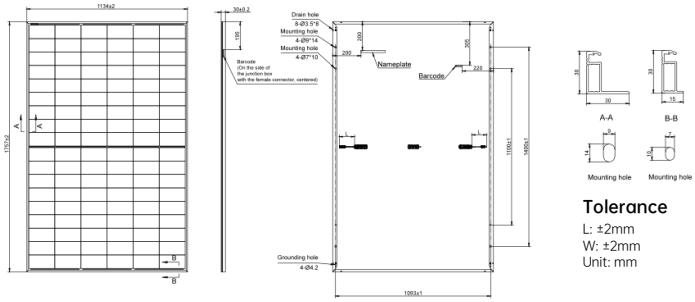
Neostar 2P

AIKO-A-MAH54Mw

485W	24.3%	≤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%

Module Type	AIKO-A450-MAH54Mw		AIKO-A455-MAH54Mw		AIKO-A460-MAH54Mw		AIKO-A465-MAH54Mw		AIKO-A470-MAH54Mw		AIKO-A475-MAH54Mw		AIKO-A480-MAH54Mw		AIKO-A485-MAH54Mw	
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P_{max} [W]	450	339	455	343	460	346	465	350	470	354	475	358	480	361	485	365
V_{oc} [V]	40.94	38.66	41.00	38.72	41.06	38.77	41.12	38.83	41.18	38.89	41.24	38.94	41.30	39.00	41.36	39.06
V_{mp} [V]	34.50	32.58	34.56	32.64	34.62	32.69	34.68	32.75	34.74	32.81	34.80	32.86	34.86	32.92	34.92	32.98
I_{sc} [A]	14.12	11.42	14.22	11.50	14.25	11.52	14.29	11.55	14.32	11.58	14.35	11.60	14.38	11.63	14.41	11.66
I_{mp} [A]	13.05	10.41	13.17	10.51	13.29	10.61	13.41	10.71	13.54	10.80	13.66	10.90	13.78	10.99	13.90	11.09
Module Efficiency	**22.6%**		**22.8%**		**23.1%**		**23.3%**		**23.6%**		**23.8%**		**24.1%**		**24.3%**	

Product Specification

Cell Type	N-Type ABC
Glass	3.2 mm 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-EVO2A
Weight	20.6kg±3%
Dimension	1757*1134*30mm
Package Detail	37pcs per pallet / 222pcs per 20'GP / 962pcs per 40'HC

Temperature Ratings (STC)

Temperature Coefficient of I_{sc}	+ 0.05%/ ℃
Temperature Coefficient of V_{oc}	- 0.22%/ ℃
Temperature Coefficient of P_{max}	- 0.26%/ ℃

Installation Guide

Operation Temperature	-40℃ - +85℃
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