




Nebular Series 1P


430W-450W


 **Partial Shading Optimisation**

 **Better Temperature Coefficient**

 **High Temperature Restriction**

 **Micro-crack Resistance**

 **Lower roof load-bearing**

 **Higher Power**

 **Lower BOS**



Product
Warranty



Performance
Warranty



red dot winner 2023

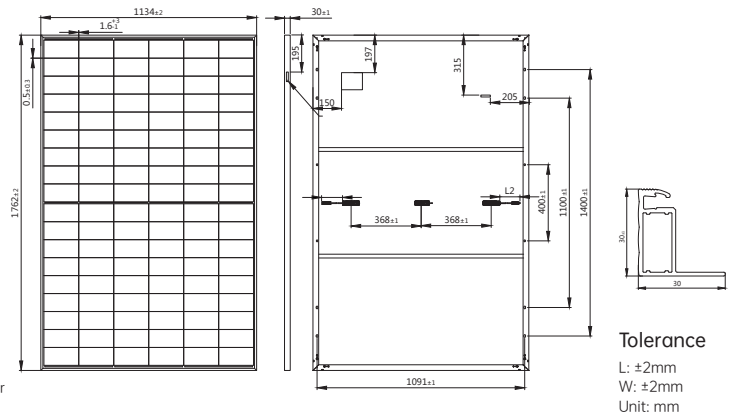
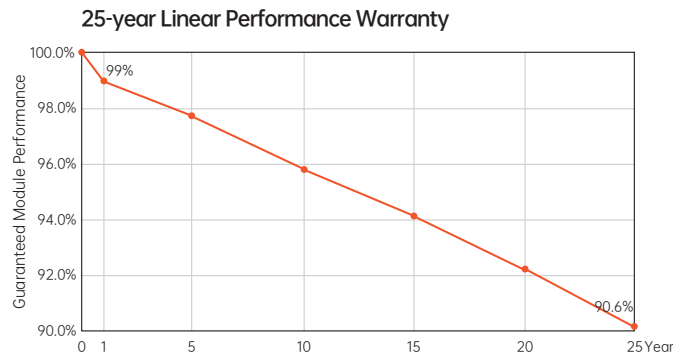


450W
Output

22.5%
Efficiency

≤ 1%
First-year Degradation

≤ 0.35%
Annual Degradation from Year



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

Module Type	AIKO-A430-MAH54Tm		AIKO-A435-MAH54Tm		AIKO-A440-MAH54Tm		AIKO-A445-MAH54Tm		AIKO-A450-MAH54Tm	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P _{max} [W]	430	324	435	327	440	331	445	335	450	339
V _{oc} [V]	40.02	37.80	40.12	37.89	40.22	37.99	40.32	38.08	40.42	38.17
V _{mp} [V]	34.31	32.41	34.41	32.50	34.51	32.59	34.61	32.69	34.71	32.78
I _{sc} [A]	13.60	11.00	13.66	11.04	13.72	11.09	13.78	11.14	13.84	11.19
I _{mp} [A]	12.54	10.00	12.65	10.09	12.75	10.18	12.86	10.26	12.97	10.35
Module Efficiency	21.5%		21.8%		22.0%		22.3%		22.5%	

Mechanical Specification

Cell Type	N-Type ABC
Front Sheet	Transparent
Back Sheet	White sheet
Frame	Black anodized aluminum
Cable	4mm ² (IEC) 12AWG(UL) 1200mm
No. of Cells	108(6*18)
Junction Box	IP68, 3bypass diodes
Connector	MC4-Evo2
Weight	8.6kg ±3%
Dimension	1762*1134*30mm
Package Detail	36pcs per pallet / 216pcs per 20' GP / 936pcs per 40' HC

Temperature Ratings (STC)

Temperature Coefficient of I _{sc}	+ 0.04%/ °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 3600Pa Back 2400Pa
Hail Test	25 mm diameter hail at 23 m/s
Fire Rating	IEC Class C

