

# NEOSTAR

2N 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



reddot winner 2023



Product Warranty  
(Extendable to 25years\*)



Performance  
Warranty



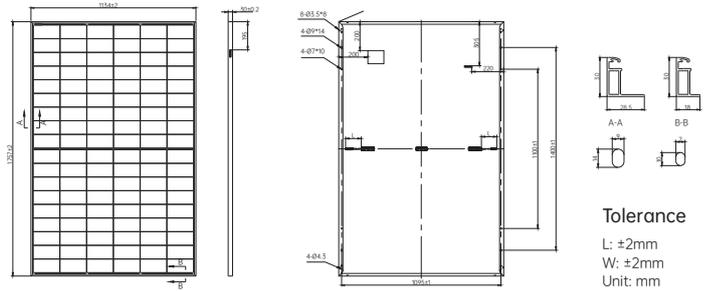
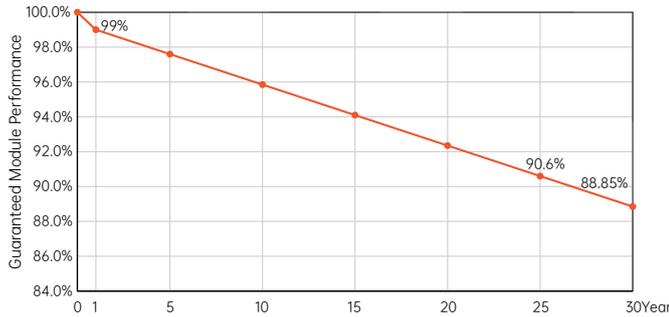
**485W**  
Output

**24.3%**  
Efficiency

**≤1%**  
First-year Degradation

**≤0.35%**  
Annual Degradation from Year 2-30

### 30-year Linear Performance Warranty



### Electrical Characteristics (STC: AM1.5 1000W/m<sup>2</sup> 25°C NOCT: AM1.5 800W/m<sup>2</sup> 20°C 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	
	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
<b>Module Efficiency</b>	<b>22.6%</b>		<b>22.8%</b>		<b>23.1%</b>		<b>23.3%</b>		<b>23.6%</b>		<b>23.8%</b>		<b>24.1%</b>		<b>24.3%</b>	

### Mechanical Specification

Cell Type	N-Type ABC
Front Cover Mono glass	3.2 mm tempered glass
Frame	Anodized aluminum
Cable	4mm <sup>2</sup> (IEC) 12AWG(UL) ±1200mm
No. of Cells	108(6*18)
Junction Box	IP68, 3 bypass diodes
Connector	MC4-Evo2
Weight	21.5kg
Dimension	1757*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	40 mm diameter hail at 23 m/s
Fire Rating	IEC Class C

