




# Neostar 2S Mono-Glass Module

## 435W-460W


Second Generation  
Comprehensive Upgrade:

 **Partial Shading Optimisation**


 **Better Temperature Coefficient**

 **High Temperature Restriction**

 **Micro-crack Resistance**

 **Higher Power**

 **Lower BOS**

 **No Front Grid Design**



Product  
Warranty



Performance  
Warranty



reddot winner 2023

### 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  
(Made in China)

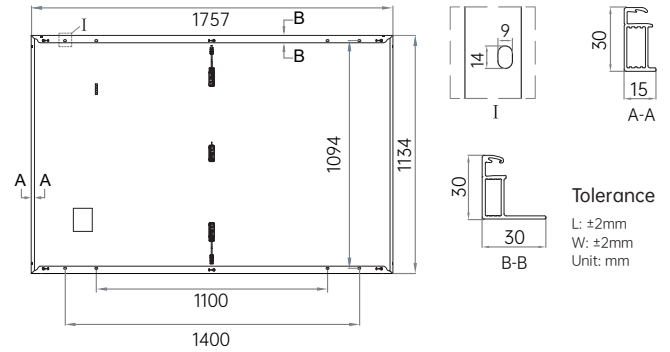
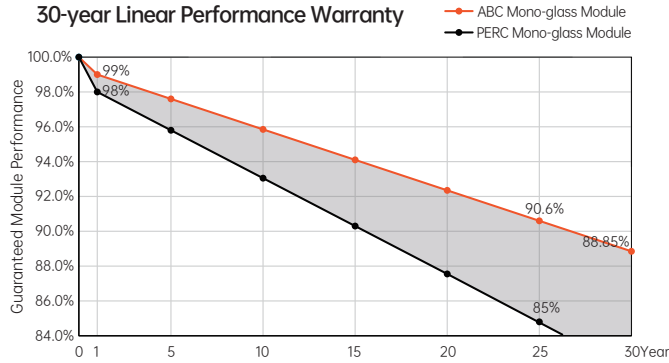


**460W**  
Output

**23.1%**  
Efficiency

**≤1%**  
First-year Degradation

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



## 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%

Model	AIKO-A435-MAH54Mb		AIKO-A440-MAH54Mb		AIKO-A445-MAH54Mb		AIKO-A450-MAH54Mb		AIKO-A455-MAH54Mb		AIKO-A460-MAH54Mb	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
$P_{max}$ [W]	435	327	440	331	445	335	450	339	455	343	460	346
$V_{oc}$ [V]	40.76	38.49	40.82	38.55	40.88	38.60	40.94	38.66	41.00	38.72	41.06	38.77
$V_{mp}$ [V]	34.32	32.41	34.38	32.47	34.44	32.52	34.50	32.58	34.56	32.64	34.62	32.69
$I_{sc}$ [A]	13.82	11.17	13.92	11.26	14.02	11.34	14.12	11.42	14.22	11.50	14.25	11.61
$I_{mp}$ [A]	12.68	10.12	12.80	10.22	12.93	10.32	13.05	10.41	13.17	10.51	13.29	10.41
<b>Module Efficiency</b>	<b>21.8%</b>		<b>22.1%</b>		<b>22.3%</b>		<b>22.6%</b>		<b>22.8%</b>		<b>23.1%</b>	

Note: Test uncertainty for  $P_{max}$ : ±3%

## Mechanical Specification

Cell Type	N-Type ABC
Front Cover Mono glass	3.2mm tempered glass
Frame	Black anodized aluminum
Cable	44mm <sup>2</sup> (IEC) 12AWG(UL) 1200mm or Customized Length
No. of Cells	108(6*18)
Junction Box	IP68, three bypass diodes
Connector	MC4 EVOA/MC4 EVO2
Weight	21.5kg±3%
Dimension	1757*1134*30mm
Package Detail	36pcs per pallet/216 pcs per 20' GP/936pcs per 40' HQ

## 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

