

# NEOSTAR

2S+60 Dual-Glass Module  
500W-520W

## Technical Features:

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



red dot winner 2023



Product Warranty



Performance Warranty



Made in China

## 520W

Output

## 23.5%

Efficiency

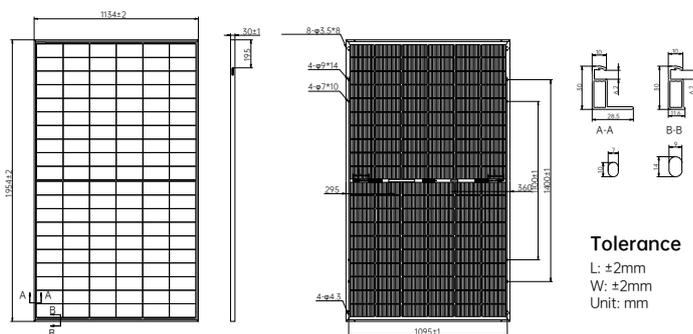
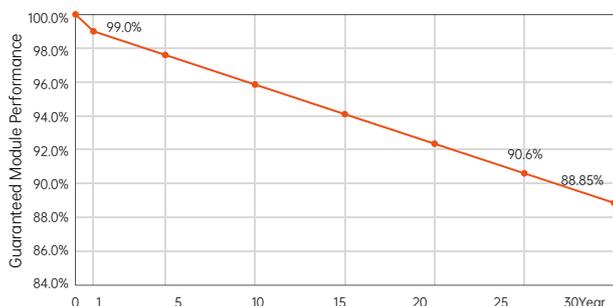
## 1%

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 BNPI: AM1.5, front 1000W/m<sup>2</sup>, rear 135W/m<sup>2</sup>, 25°C) $\phi V_{oc}=97\% \pm 5\%$ $\phi I_{sc}=42\% \pm 5\%$ $\phi P_{max}=39\% \pm 5\%$ Power Binning Tolerance: 0~+3%

Module Type	AIKO-A500-MAH60Db		AIKO-A505-MAH60Db		AIKO-A510-MAH60Db		AIKO-A515-MAH60Db		AIKO-A520-MAH60Db	
	STC	BNPI								
$P_{max}$ [W]	500	525	505	530	510	535	515	540	520	545
$V_{oc}$ [V]	45.02	45.02	45.12	45.12	45.22	45.22	45.32	45.32	45.42	45.42
$V_{mp}$ [V]	37.90	37.90	38.00	38.00	38.10	38.10	38.20	38.20	38.30	38.30
$I_{sc}$ [A]	14.05	14.84	14.11	14.91	14.17	14.98	14.23	15.05	14.29	15.12
$I_{mp}$ [A]	13.20	13.86	13.30	13.95	13.39	14.05	13.49	14.14	13.58	14.23
<b>Module Efficiency</b>	<b>22.6%</b>		<b>22.8%</b>		<b>23.0%</b>		<b>23.2%</b>		<b>23.5%</b>	

### Electrical characteristics with different power bin (reference to 5% & 10% backside power gain)

Backside Power Gain	5%		10%		5%		10%		5%		10%	
	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%
$P_{max}$ [W]	525	550	530	556	536	561	541	567	546	572	546	572
$V_{oc}$ [V]	45.02	45.02	45.12	45.12	45.22	45.22	45.32	45.32	45.42	45.42	45.42	45.42
$V_{mp}$ [V]	37.90	37.90	38.00	38.00	38.10	38.10	38.20	38.20	38.30	38.30	38.30	38.30
$I_{sc}$ [A]	14.75	15.46	14.82	15.52	14.88	15.59	14.94	15.65	15.00	15.72	15.00	15.72
$I_{mp}$ [A]	13.86	14.52	13.97	14.63	14.06	14.73	14.16	14.84	14.26	14.94	14.26	14.94

### Product Specification

Cell Type	N-Type ABC
Glass	Dual glass, 2.0+2.0mm coated semi tempered glass
Frame	Black Anodized aluminum
Cable	4mm <sup>2</sup> (IEC) 12AWG(UL) ±1200mm
No. of Cells	120(6*20)
Junction Box	IP68, 3 bypass diodes
Connector	PV-KST4-EVO 2A/6I/ PV-KBT4-EVO 2A/6I from Staubli ElectricalConnectors AG
Weight	26.5kg±3%
Dimension	1954*1134*30mm
Package Detail	37pcs per pallet / 185pcs per 20'GP / 888pcs 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

$T_{98}$ max	70°C
Module Operation Temperature	-40°C - +85°C
Maximum Series Fuse Rating	25A
Protection Class	Class II
$P_{max}$ and $V_{oc}$ 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 A

