

NEOSTAR

2S+ Dual-Glass Module
440W-475W

Technical Features:

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



red dot winner 2023



Product Warranty



Performance Warranty



Warranty partner

Munich RE 

Made in China

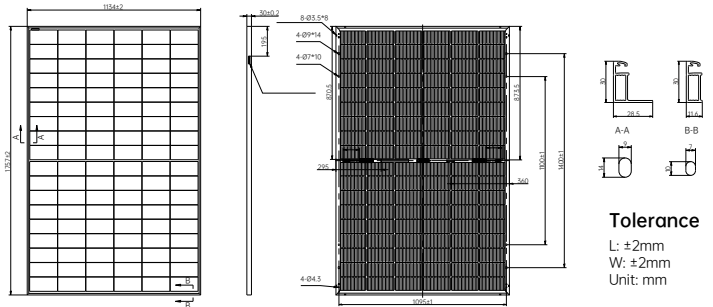
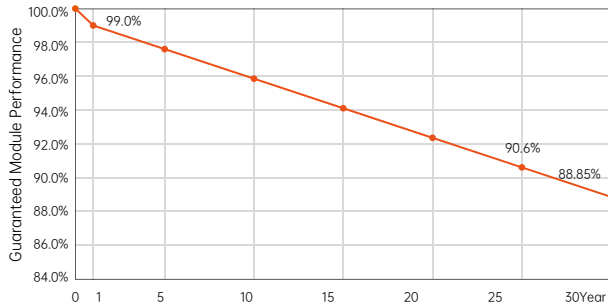
470W
Output

23.6%
Efficiency

1%
First-year Degradation

0.35%
Annual Degradation from Year 2-30

30-year Linear Performance Warranty



Tolerance
L: ±2mm
W: ±2mm
Unit: mm

Electrical Characteristics (STC: AM1.5 1000W/m ² 25°C BNPI: AM1.5, front 1000W/m ² , rear 135W/m ² , 25°C)								$\phi V_{oc}=97\pm5\%$ $\phi I_{sc}=38\pm5\%$ $\phi P_{max}=39\pm5\%$ Power Binning Tolerance: 0-+3%	
Module Type	AIKO-A455-MAH54Db		AIKO-A460-MAH54Db		AIKO-A465-MAH54Db		AIKO-A470-MAH54Db		
Test Conditions	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	
P_{max} [W]	455	475	460	480	465	485	470	490	
V_{oc} [V]	41.00	41.00	41.06	41.06	41.12	41.12	41.18	41.18	
V_{mp} [V]	34.56	34.56	34.62	34.62	34.68	34.68	34.74	34.74	
I_{sc} [A]	14.22	14.83	14.25	14.93	14.29	15.03	14.32	15.13	
I_{mp} [A]	13.17	13.75	13.29	13.87	13.41	13.99	13.54	14.11	
Module Efficiency	22.8%		23.1%		23.3%		23.6%		

Electrical characteristics with different power bin (reference to 5% & 10% backside power gain)								
Backside Power Gain	5%	10%	5%	10%	5%	10%	5%	10%
P_{max} [W]	478	501	483	506	488	512	494	517
V_{oc} [V]	41.00	41.00	41.06	41.06	41.12	41.12	41.18	41.18
V_{mp} [V]	34.56	34.56	34.62	34.62	34.68	34.68	34.74	34.74
I_{sc} [A]	14.93	15.64	14.96	15.68	15.00	15.72	15.04	15.75
I_{mp} [A]	13.83	14.49	13.95	14.62	14.08	14.75	14.22	14.89

Product Specification	
Cell Type	N-Type BC
Glass	Dual glass, 2.0 + 2.0mm coated semi tempered glass
Frame	Black Anodized aluminum
Cable	4mm ² (IEC) 12AWG(UL) ±1200mm
No. of Cells	108(6*18)
Junction Box	IP68, 3 bypass diodes
Connector	PV-KST4-EVO 2A/6I/ PV-KBT4-EVO 2A/6I from Staubli ElectricalConnectors AG
Weight	24.2kg±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%/ °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	35mm diameter hail at 27.2m/s
Fire Rating	IEC Class A



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*AIKO reserves right to update the specification without notice
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