





# NEOSTAR

3S+54 Dual-Glass Module

460W-490W

## Technical Features:

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



red dot winner 2023



Product Warranty



Performance Warranty



Warranty partner

Munich RE 

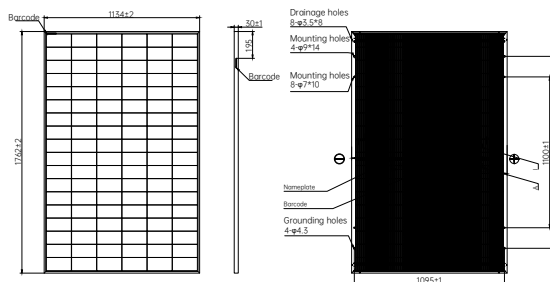
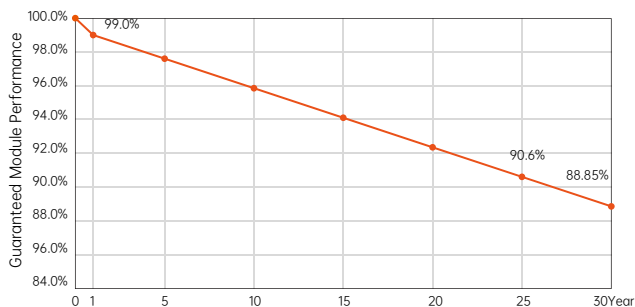
**490W**  
Output

**24.5%**  
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<sup>2</sup> 25°C NOCT: AM1.5 800W/m<sup>2</sup> 20°C 1m/s) Power Tolerance: 0~ + 3%

Module Type	AIKO-A460-MCE54Db		AIKO-A465-MCE54Db		AIKO-A470-MCE54Db		AIKO-A475-MCE54Db		AIKO-A480-MCE54Db		AIKO-A485-MCE54Db		AIKO-A490-MCE54Db	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P <sub>max</sub> [W]	460	349	465	352	470	356	475	360	480	364	485	367	490	371
V <sub>oc</sub> [V]	40.50	38.42	40.60	38.52	40.70	38.61	40.80	38.71	40.90	38.80	41.00	38.90	41.10	38.99
V <sub>mp</sub> [V]	34.10	32.35	34.20	32.45	34.30	32.54	34.40	32.64	34.50	32.73	34.60	32.83	34.70	32.92
I <sub>sc</sub> [A]	14.66	11.85	14.69	11.87	14.72	11.89	14.76	11.93	14.80	11.96	14.84	11.99	14.88	12.02
I <sub>mp</sub> [A]	13.50	10.89	13.60	10.87	13.71	10.96	13.81	11.04	13.92	11.13	14.02	11.21	14.13	11.29
<b>Module Efficiency</b>	<b>23.0%</b>		<b>23.3%</b>		<b>23.5%</b>		<b>23.8%</b>		<b>24.0%</b>		<b>24.3%</b>		<b>24.5%</b>	

**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	106(6*18)
Junction Box	IP68, 3 bypass diodes
Connector	Original MC4
Weight	24.2kg±3%
Dimension	1762*1134*30mm
Package Detail	37pcs per pallet / 222pcs per 20'GP / 962pcs per 40'HC

**Temperature Ratings (STC)**

Temperature Coefficient of I <sub>sc</sub>	+ 0.05%/ °C
Temperature Coefficient of V <sub>oc</sub>	- 0.22%/ °C
Temperature Coefficient of P <sub>max</sub>	- 0.26%/ °C

**Installation Guide**

Operation Temperature	-40°C - +85°C
Maximum Series Fuse Rating	25A
Protection Class	Class II
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



www.aikosolar.com  
marketing@aikosolar.com

\*AIKO reserves right to update the specification without notice  
V2.1\_202502\_DsDr\_EN