

NEOSTAR

3S+54 Dual-Glass Module

470W-485W

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



Made in China

485W

Output

24.3%

Efficiency

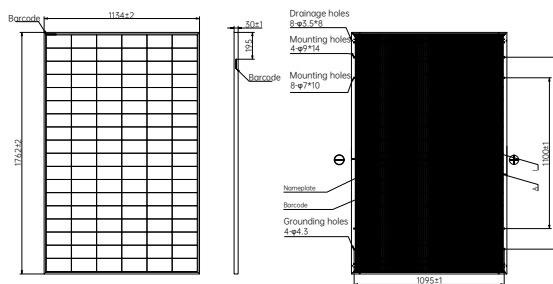
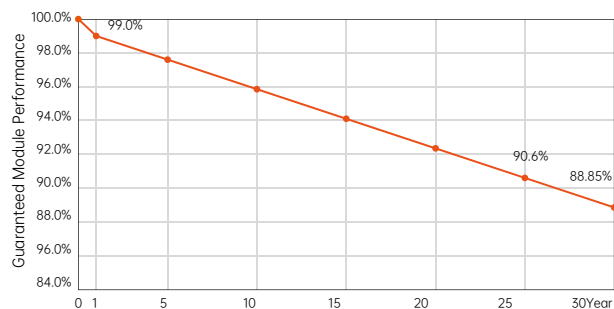
1%

First-year Degradation

0.35%

Annual Degradation from Year 2-30

30-year Linear Performance Warranty



Tolerance

L: $\pm 2\text{mm}$
W: $\pm 2\text{mm}$
Unit: mm

Electrical Characteristics

STC: AM1.5, 1000W/m², 25°CBNPI: AM1.5, front 1000W/m^2 , rear 135W/m^2 , 25°C

$\phi_{Voc}=98\%\pm 5\%$ $\phi_{Isc}=45\%\pm 5\%$ $\phi_{Pmax}=40\%\pm 5\%$ Power Bining Tolerance: 0~3%

Module Type	AIKO-A470-MCE54Db		AIKO-A475-MCE54Db		AIKO-A480-MCE54Db		AIKO-A485-MCE54Db	
Test Conditions	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Pmax [W]	470	495	475	500	480	505	485	510
Voc [V]	40.70	40.70	40.80	40.80	40.90	40.90	41.00	41.00
Vmp [V]	34.30	34.30	34.40	34.40	34.50	34.50	34.60	34.60
Isc [A]	14.72	15.52	14.76	15.56	14.80	15.60	14.84	15.64
Imp [A]	13.71	14.44	13.81	14.54	13.92	14.64	14.02	14.75
Module Efficiency	23.5%		23.8%		24.0%		24.3%	

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

Backside Power Gain	5%	10%	5%	10%	5%	10%	5%	10%
Pmax [W]	494	517	499	523	504	528	509	534
Voc [V]	40.70	40.70	40.80	40.80	40.90	40.90	41.00	41.00
Vmp [V]	34.30	34.30	34.40	34.40	34.50	34.50	34.60	34.60
Isc [A]	15.46	16.19	15.50	16.24	15.54	16.28	15.58	16.32
Imp [A]	14.40	15.08	14.50	15.19	14.62	15.31	14.72	15.42

Product Specification

Cell Type	N-Type BC
Glass	Dual glass, 2.0 + 2.0mm coated semi tempered glass
Frame	Black anodized aluminum
Cable	4mm²(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	1762*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	30A
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	30mm diameter hail at 23.9m/s
Fire Rating	IEC Class A

