AIKO

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

TIER 1 BloombergNEF

ESG Sustainability Award 2023/24 Excellence

inter solar award 2023 WINNER

reddot winner 2023

25 year Product Warranty

30 year Performance Warranty

CE

TÜVRheinland

Warranty partner

Munich RE

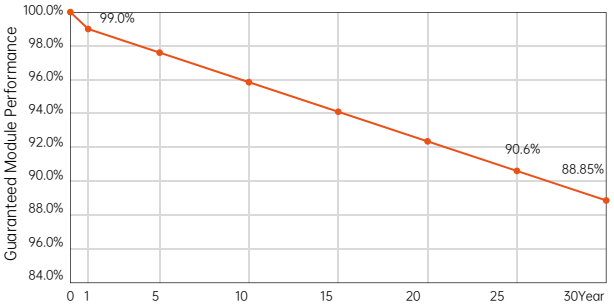
Made in China

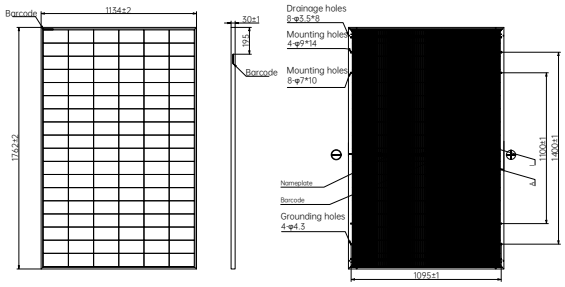
Neostar 3S+54

AIKO-Axxx-MCE54Db

485W	24.3%	1%	0.35%
Output	Efficiency	First-year Degradation	Annual Degradation from Year 2-30

30-year Linear Performance Warranty





Tolerance
L: ±2mm
W: ±2mm
Unit: mm

Electrical Characteristics

STC: AM1.5, 1000W/m², 25℃
BNPI: AM1.5, front 1000W/m², rear 135W/m², 25℃

φVoc=98%±5% φIsc=45%±5% φPmax=40%±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℃
Module Operation Temperature	-40℃ - +85℃
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

Zhejiang Aiko Solar Technology Co., Ltd.
www.aikosolar.com
marketing@aikosolar.com

*AIKO reserves right to update the specification without notice
V2.1_202502_DsDr_EN
*AU version only