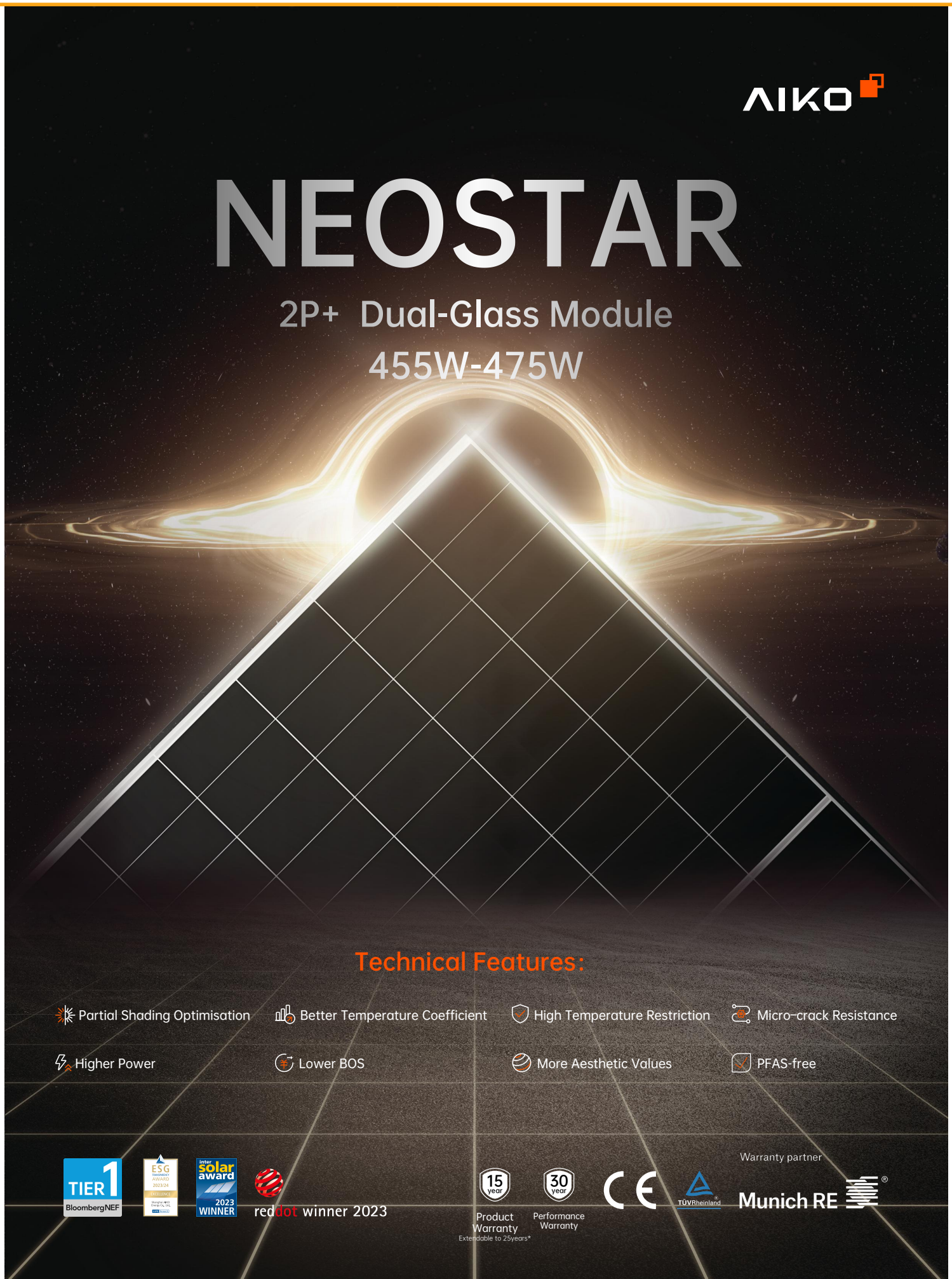
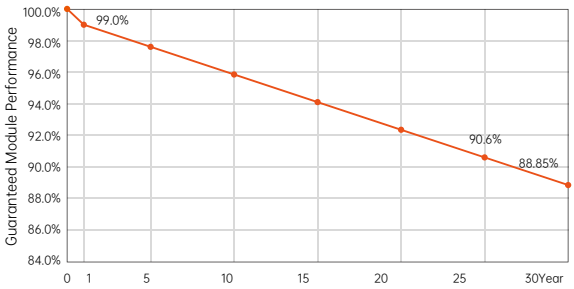

AIKO
NEOSTAR
2P+ Dual-Glass Module
455W-475W
Technical Features:
Partial Shading Optimisation
Better Temperature Coefficient
High Temperature Restriction
Micro-crack Resistance
Higher Power
Lower BOS
More Aesthetic Values
PFAS-free
TIER 1
BloombergNEF
inter Solar award 2023 WINNER
reddot winner 2023
15 year
Product Warranty
Extendable to 25years*
30 year
Performance Warranty
TÜVRheinland
Warranty partner
Munich RE

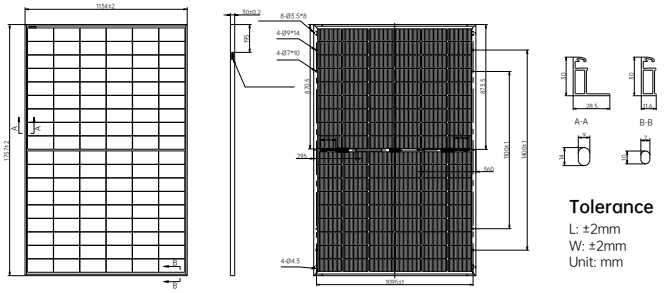
Neostar 2P+

AIKO-A-MAH54Dw

475W	23.8%	≤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℃ NOCT: AM1.5 800W/m² 20℃ 1m/s) Power Tolerance:0~ + 3%

Module Type	AIKO-A455-MAH54Dw		AIKO-A460-MAH54Dw		AIKO-A465-MAH54Dw		AIKO-A470-MAH54Dw		AIKO-A475-MAH54Dw	
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Pmax [W]	455	343	460	346	465	350	470	354	475	358
Voc [V]	41.00	38.72	41.06	38.77	41.12	38.83	41.18	38.89	41.24	38.94
Vmp [V]	34.56	32.64	34.62	32.69	34.68	32.75	34.74	32.81	34.80	32.86
Isc [A]	14.22	11.50	14.25	11.52	14.29	11.55	14.32	11.58	14.35	11.60
Imp [A]	13.17	10.32	13.29	10.41	13.41	10.51	13.54	10.61	13.66	10.71
Module Efficiency	**22.8%**		**23.1%**		**23.3%**		**23.6%**		**23.8%**	

Product Specification

Cell Type	N-Type ABC
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	Original MC4-EVO2A
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 Isc	+ 0.05%/ ℃
Temperature Coefficient of Voc	- 0.22%/ ℃
Temperature Coefficient of Pmax	- 0.26%/ ℃

Installation Guide

Operation Temperature	-40℃ - +85℃
Maximum Series Fuse Rating	25A
Protection Class	Class II
Voc and Isc 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