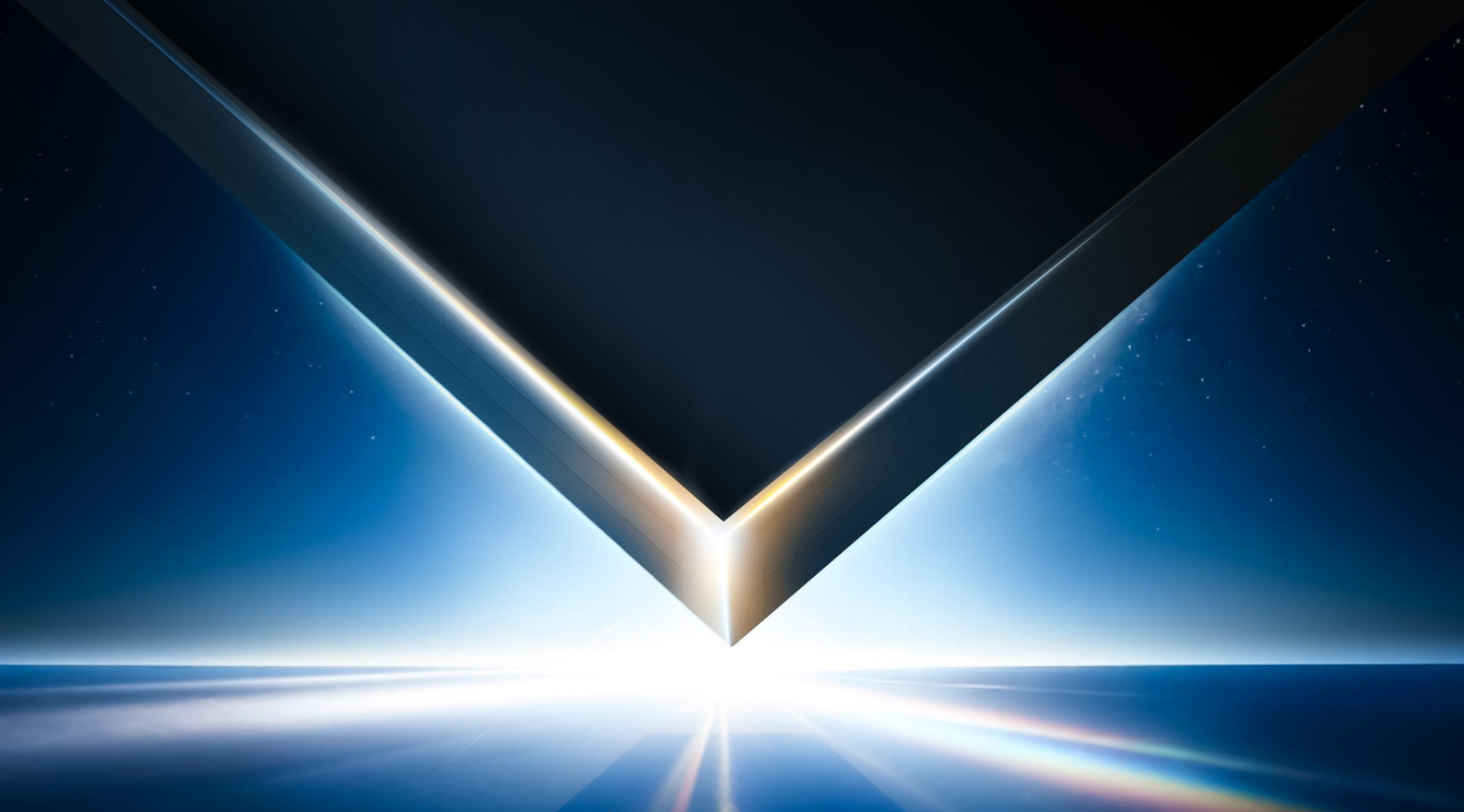
AIKO

Z-Series

Draft

G4-54Dbm



Ultimate Black

500W Under 2㎡, Under 25kg

Hot Spot Temperature < 100℃

40-year product warranty + 40-year performance warranty

Q3 2025 BloombergNEF TIER 1 PV Modules

inter solar award 2023 WINNER

ESG TRANSMITTAL AWARD 2024/25

reddot winner

Ariel Green

CE

TÜVRheinland

40 year Product Warranty

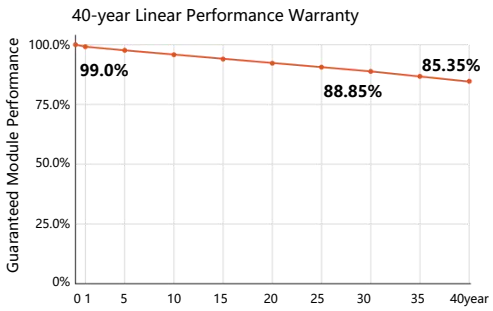
40 year Performance Warranty

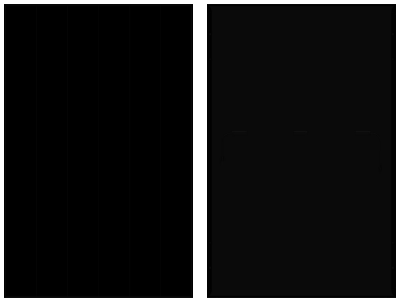
IEC61215/IEC61730
IEC61701/IEC62716

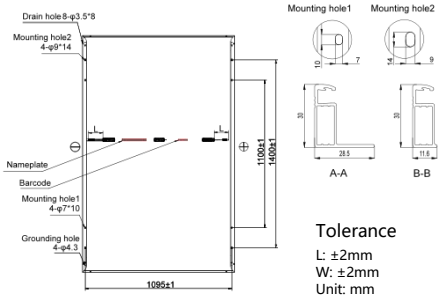
ISO9001:ISO Quality Management System
ISO14001:ISO Environmental Management System
ISO14064:Greenhouse Gas Verification Statement
ISO45001:ISO Occupational Health and Safety Management System

Z-Series

500W	25%	≤1%	≤0.35%
Output	Efficiency	First-year Degradation	Annual Degradation from Year 2-40







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-A500-MCE54Db	
Test Conditions	STC	NOCT
Pmax [W]	500	379
Voc [V]	41.30	39.18
Vmp [V]	34.90	33.11
Isc [A]	14.96	12.09
Imp [A]	14.33	11.46
Module Efficiency	25.0%	

Product Specification

Cell Type	N-Type ABC
Front cover	2.0mm coated semi-tempered glass
Rear cover	2.0mm 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	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
NOCT(Nominal Operating Cell Temperature)	45℃ (±2℃)

Installation Guide

Operation Temperature	-40℃ - +70℃
Maximum Series Fuse Rating	25A
Protection Class	ClassⅡ
Maximum System Voltage	DC1500V
Maximum Static Loading	Front 5400Pa Back 2400Pa
Hail Test	35 mm diameter hail at 27.2 m/s
Fire Rating	IEC Class A

Official Website
Scan to visit AIKO

Installer Community
Get rewarded for installing AIKO

*AIKO reserves right to update the specification without notice
*Optional Ariel Green coverage is available upon request
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