SMART SOLAR

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AIKO Stellar 3N+72 Dual-Glass

Bifacial N-Type ABC Module | 650W – 685W

685W MAX POWER

25.4% MAX EFFICIENCY

Partial Shading Optimisation
Maximizes yield under partial shade with ABC cell tech.

Superior Temp. Coeff.
-0.26%/°C Pmax coefficient for high ambient heat.

Micro-crack Resistance
Dual-glass architecture provides structural durability.

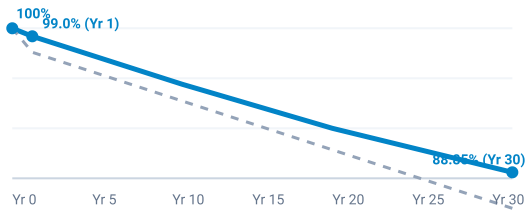
30-Year Performance
Guaranteed ≤1% 1st year and 0.35% annual degradation.

Warranty & Guarantees

Tier 1 BloombergNEF

15	30
Product Warranty	Linear Performance

Linear Performance Degradation



Blue line: AIKO Linear Guarantee | Dashed: Industry Standard

Mechanical Specifications

Cell Type: N-Type ABC

No. of Cells:	144 (6 × 24)
Glass:	Dual glass, 2.0+2.0mm semi-tempered
Frame:	Anodized Aluminum Alloy
Junction Box:	IP68, 3 bypass diodes
Output Cable:	4mm² (IEC), 12AWG (UL)
Connector:	MC4 Compatible / MC4-EVO2A
Dimensions:	2382 × 1134 × 30 mm
Weight:	32.2 kg ± 3%

Operating Characteristics

Operation Temp:	-40°C to +85°C
Max Series Fuse:	30 A
Protection Class:	Class II
Max System Voltage:	DC 1500 V
Max Static Loading:	Front 5400Pa / Back 2400Pa
Fire Rating:	IEC Class A

Electrical Characteristics (STC: AM1.5 1000W/m² 25°C)

Power Tolerance: 0 ~ +3%

MODULE TYPE	AIKO-A655	AIKO-A665	AIKO-A675	AIKO-A685
Nominal Max Power (Pmax) [W]	**655**	**665**	**675**	**685**
Open Circuit Voltage (Voc) [V]	55.00	55.20	55.40	55.60
Voltage at Pmax (Vmp) [V]	44.89	45.09	45.29	45.49
Short Circuit Current (Isc) [A]	15.33	15.45	15.59	15.73
Current at Pmax (Imp) [A]	14.60	14.75	14.91	15.07
Module Efficiency [%]	**24.2%**	**24.6%**	**25.1%**	**25.4%**

Temperature Ratings (STC)

Temp. Coeff. of Isc	Temp. Coeff. of Voc	Temp. Coeff. of Pmax
+0.05% / °C	-0.22% / °C	-0.26% / °C

● IEC 61215 / IEC 61730 ● ISO 9001:2015 Quality ● ISO 14001:2015 Environment ● TÜV Rheinland Certified ● Red Dot Winner 2023