



N-Type ABC Neostar Series

AIKO-A-MAH54Mb

Up to **23.6%**
445W-460W



Product
Warranty



Performance
Warranty



reddot winner 2023

Full Black Design

No grid lines on the front

Higher Power Output

Higher efficiency: 23.6%

Lower degradation: 1 year $\leq 1.0\%$, 2 -30 year $\leq 0.35\%$

Better temperature coefficient: $-0.26\%/^{\circ}\text{C}$

Optimized Balance of System (BOS)

Significant savings on mounting structure, cabling, and labour cost

Complete Set of Quality Management System

IEC 61730 (2016) IEC 61215 (2021)

ISO 9001:2015 Quality Management System

ISO 14001:2015 Environmental Management System

ISO 45001:2018 Occupational Safety and Management System

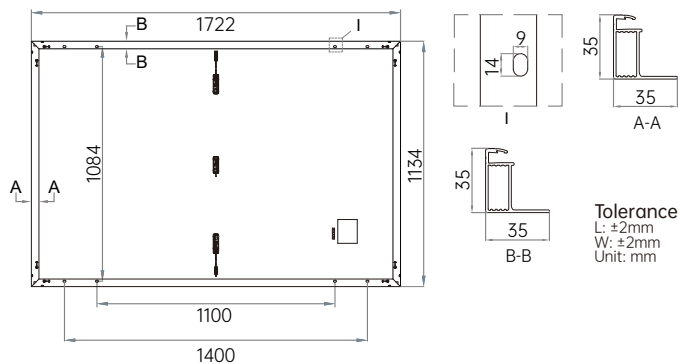
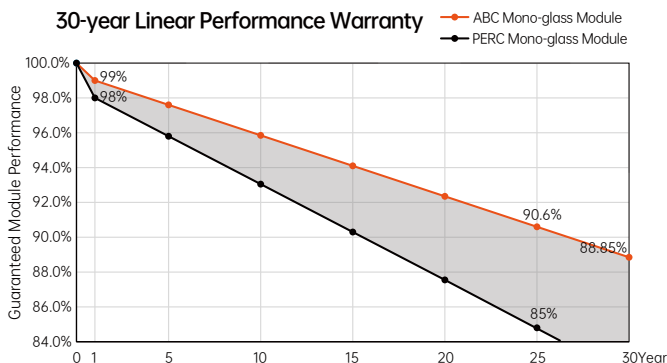


460W
Output

23.6%
Efficiency

≤1%
First-year Degradation

≤0.35%
Annual Degradation from Year 2-30



| Electrical Characteristics (STC: AM1.5 1000W/m ² 25°C NOCT: AM1.5 800W/m ² 20°C 1m/s) | | | | | | | | Power Tolerance: 0- + 3% | |
|---|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|--------------------------|--|
| Model | AIKO-A445-MAH54Mb | | AIKO-A450-MAH54Mb | | AIKO-A455-MAH54Mb | | AIKO-A460-MAH54Mb | | |
| Test Conditions | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | |
| P _{max} [W] | 445 | 335 | 450 | 339 | 455 | 343 | 460 | 346 | |
| V _{oc} [V] | 40.60 | 38.34 | 40.70 | 38.44 | 40.80 | 38.53 | 40.90 | 38.63 | |
| V _{mp} [V] | 33.60 | 31.73 | 33.70 | 31.82 | 33.80 | 31.92 | 33.90 | 32.01 | |
| I _{sc} [A] | 13.86 | 11.21 | 13.92 | 11.26 | 13.98 | 11.31 | 14.04 | 11.36 | |
| I _{mp} [A] | 13.25 | 10.57 | 13.36 | 10.66 | 13.47 | 10.75 | 13.58 | 10.84 | |
| Module Efficiency | 22.8% | | 23.0% | | 23.3% | | 23.6% | | |

| Mechanical Specification | |
|--------------------------|---|
| Cell Type | N-Type ABC |
| Front Cover Mono glass | 3.2 mm tempered glass |
| Frame | Black anodized aluminum |
| Cable | 4mm ² (IEC) 12AWG(UL) 1200mm or Customized Length |
| No. of Cells | 108(6*18) |
| Junction Box | IP68, three bypass diodes |
| Connector | MC4 EVO2 |
| Weight | 21.6kg±3% |
| Dimension | 1722*1134*35mm |
| Package Detail | 31pcs per pallet/186 pcs per 20' GP/806pcs per 40' HQ |

| 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 | |
|---|-------------------------------|
| Operation Temperature | - 40°C-+85°C |
| Maximum Series Fuse Rating | 25A |
| Protection Class | Class II |
| V _{oc} and I _{sc} 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 C |