AIKO

# NEBULAR

## 2P Mono-Facial Module

430W-460W



### Technical Features:

- Partial Shading Optimisation
- Better Temperature Coefficient
- High Temperature Restriction
- Micro-crack Resistance
- Higher Power
- Lower BOS
- More Aesthetic Values

ESG

intersolar award 2023 WINNER

reddot winner 2023

12 year Product Warranty

25 year Performance Warranty

CE

TÜVRheinland

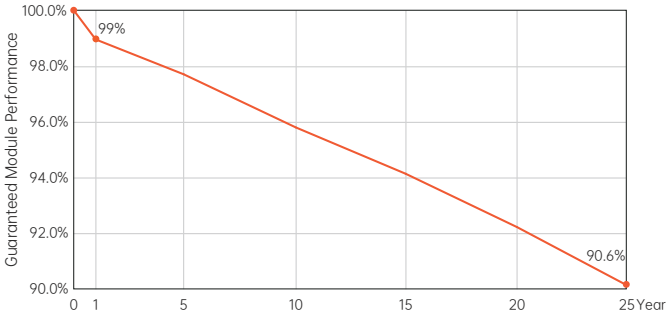
Munich RE

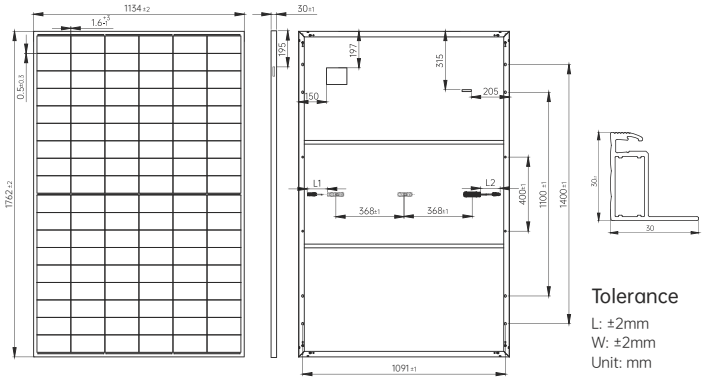
# Nebular 2P

## AIKO-A-MAH54Tm

| 460W | 23.0% | ⩽1% | ⩽0.35% |
|---|---|---|---|
| Output | Efficiency | First-year Degradation | Annual Degradation from Year |

### 25-year Linear Performance Warranty




## Electrical Characteristics (STC: AM1.5 1000W/m² 25℃ NOCT: AM1.5 800W/m² 20℃ 1m/s) Power Tolerance:0~ + 3%

| Module Type | AIKO-A435-MAH54Tm | | AIKO-A440-MAH54Tm | | AIKO-A445-MAH54Tm | | AIKO-A450-MAH54Tm | | AIKO-A455-MAH54Tm | | AIKO-A460-MAH54Tm | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Test Conditions | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| $P_{max}$ [W] | 435 | 327 | 440 | 331 | 445 | 335 | 450 | 339 | 455 | 343 | 460 | 346 |
| $V_{oc}$ [V] | 40.76 | 38.49 | 40.82 | 38.55 | 40.88 | 38.60 | 40.94 | 38.66 | 41.00 | 38.72 | 41.06 | 38.77 |
| $V_{mp}$ [V] | 34.32 | 32.41 | 34.38 | 32.47 | 34.44 | 32.52 | 34.50 | 32.58 | 34.56 | 32.64 | 34.62 | 32.69 |
| $I_{sc}$ [A] | 13.82 | 11.17 | 13.92 | 11.26 | 14.02 | 11.34 | 14.12 | 11.42 | 14.22 | 11.50 | 14.25 | 11.52 |
| $I_{mp}$ [A] | 12.68 | 10.12 | 12.80 | 10.22 | 12.93 | 10.32 | 13.05 | 10.41 | 13.17 | 10.51 | 13.29 | 10.61 |
| **Module Efficiency** | **21.8%** | | **22.0%** | | **22.3%** | | **22.5%** | | **22.8%** | | **23.0%** | |

## Mechanical Specification

| | |
|---|---|
| Cell Type | N-Type ABC |
| Front Sheet | Transparent |
| Back Sheet | White sheet |
| Frame | Black anodized aluminum |
| Cable | 4mm²(IEC) 12AWG(UL) 1200mm |
| No. of Cells | 108(6*18) |
| Junction Box | IP68, 3bypass diodes |
| Connector | MC4-Evo2 |
| Weight | 8.6kg±3% |
| Dimension | 1762*1134*30mm |
| Package Detail | 36pcs per pallet / 216pcs per 20' GP / 936pcs per 40' HC |

## Temperature Ratings (STC)

| | |
|---|---|
| Temperature Coefficient of $I_{sc}$ | + 0.04%/ ℃ |
| Temperature Coefficient of $V_{oc}$ | - 0.22%/ ℃ |
| Temperature Coefficient of $P_{max}$ | - 0.26%/ ℃ |

## Installation Guide

| | |
|---|---|
| Operation Temperature | -40℃ - +85℃ |
| Maximum Series Fuse Rating | 25A |
| Protection Class | Class II |
| $V_{oc}$ and $I_{sc}$ Tolerance | ±3% |
| Maximum System Voltage | DC1500V |
| Maximum Static Loading | Front 3600Pa Back 2400Pa |
| Hail Test | 25 mm diameter hail at 23 m/s |
| Fire Rating | IEC Class C |


www.aikosolar.com
marketing@aikosolar.com



*AIKO reserves right to update the specification without notice



DSDr_EN_2405_V1.5