



Neostar 2S Mono-Glass Module

445W-470W

Second Generation
Comprehensive Upgrade:

 **Partial Shading Optimisation**

 **Better Temperature Coefficient**

 **High Temperature Restriction**

 **Micro-crack Resistance**

 **Higher Power**

 **Lower BOS**

 **No Front Grid Design**



Product
Warranty



Performance
Warranty



reddot winner 2023

Complete Set of Quality Management System

IEC 61730 (2023) IEC 61215 (2021)
ISO 9001:2015 Quality Management System
ISO 14001:2015 Environmental Management System
ISO 45001:2018 Occupational Safety and Management System
(Made in China)

Munich RE 

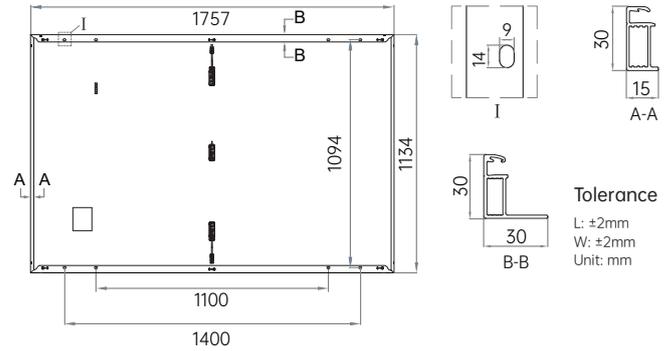
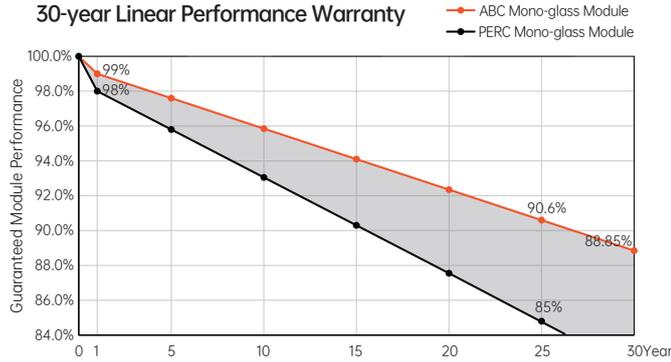


470W
Output

23.6%
Efficiency

≤1%
First-year Degradation

≤0.35%
Annual Degradation from Year 2-30



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

| Model | AIKO-A445-MAH54Mb | | AIKO-A450-MAH54Mb | | AIKO-A455-MAH54Mb | | AIKO-A460-MAH54Mb | | AIKO-A465-MAH54Mb | | AIKO-A470-MAH54Mb | |
|--------------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| | STC | NOCT |
| P_{max} [W] | 445 | 335 | 450 | 339 | 455 | 343 | 460 | 346 | 465 | 350 | 470 | 354 |
| V_{oc} [V] | 40.88 | 38.60 | 40.94 | 38.66 | 41.00 | 38.72 | 41.06 | 38.77 | 41.12 | 38.83 | 41.18 | 38.89 |
| V_{mp} [V] | 34.44 | 32.52 | 34.50 | 32.58 | 34.56 | 32.64 | 34.62 | 32.69 | 34.68 | 32.75 | 34.74 | 32.81 |
| I_{sc} [A] | 14.02 | 11.34 | 14.12 | 11.42 | 14.22 | 11.50 | 14.25 | 11.61 | 14.29 | 11.55 | 14.32 | 11.58 |
| I_{mp} [A] | 12.93 | 10.32 | 13.05 | 10.41 | 13.17 | 10.51 | 13.29 | 10.41 | 13.41 | 10.71 | 13.54 | 10.80 |
| Module Efficiency | 22.3% | | 22.6% | | 22.8% | | 23.1% | | 23.3% | | 23.6% | |

Mechanical Specification

| | |
|------------------------|--|
| Cell Type | N-Type ABC |
| Front Cover Mono glass | 3.2mm tempered glass |
| Frame | Black anodized aluminum |
| Cable | 44mm ² (IEC) 12AWG(UL) 1200mm or Customized Length |
| No. of Cells | 108(6*18) |
| Junction Box | IP68, three bypass diodes |
| Connector | Staubli EVO2 |
| Weight | 21.5kg±3% |
| Dimension | 1757*1134*30mm |
| Package Detail | 36pcs per pallet/216 pcs per 20' GP/936pcs 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 |
| P_{max} and 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 |



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*AIKO Energy reserves right to update the specification without notice
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