



# Neostar 2P

Mono-Glass Module

## 450W-475W

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 

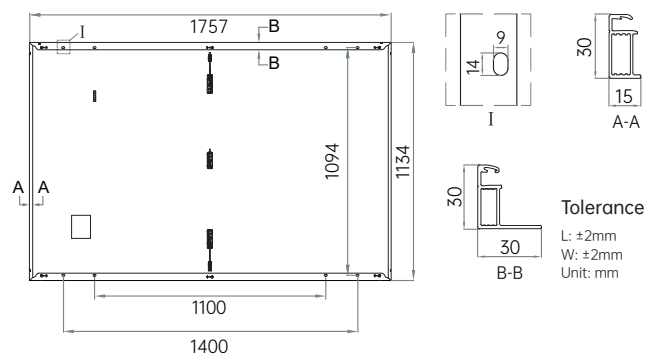
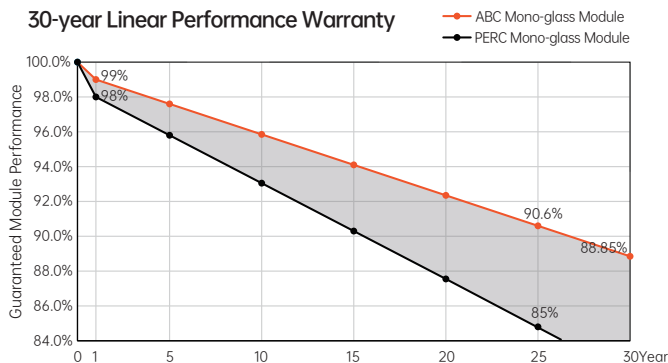


**475W**  
Output

**23.8%**  
Efficiency

 $\leq 1\%$   
First-year Degradation

 $\leq 0.35\%$   
Annual Degradation from Year 2-30

**30-year Linear Performance Warranty**

**Electrical Characteristics** (STC: AM1.5 1000W/m<sup>2</sup> 25°C NOCT: AM1.5 800W/m<sup>2</sup> 20°C 1m/s)

Power Tolerance: 0~ +3%

| Model                | AIKO-A450-MAH54Mw |       | AIKO-A455-MAH54Mw |       | AIKO-A460-MAH54Mw |       | AIKO-A465-MAH54Mw |       | AIKO-A470-MAH54Mw |       | AIKO-A475-MAH54Mw |       |
|----------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| Test Conditions      | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  |
| P <sub>max</sub> [W] | 450               | 339   | 455               | 343   | 460               | 346   | 465               | 350   | 470               | 354   | 475               | 358   |
| V <sub>oc</sub> [V]  | 40.94             | 38.66 | 41.00             | 38.72 | 41.06             | 38.77 | 41.12             | 38.83 | 41.18             | 38.89 | 41.24             | 38.94 |
| V <sub>mp</sub> [V]  | 34.50             | 32.58 | 34.56             | 32.64 | 34.62             | 32.69 | 34.68             | 32.75 | 34.74             | 32.81 | 34.80             | 32.86 |
| I <sub>sc</sub> [A]  | 14.12             | 11.42 | 14.22             | 11.50 | 14.25             | 11.61 | 14.29             | 11.55 | 14.32             | 11.58 | 14.35             | 11.60 |
| I <sub>mp</sub> [A]  | 13.05             | 10.41 | 13.17             | 10.51 | 13.29             | 10.41 | 13.41             | 10.71 | 13.54             | 10.80 | 13.66             | 10.90 |
| Module Efficiency    | 22.6%             |       | 22.8%             |       | 23.1%             |       | 23.3%             |       | 23.6%             |       | 23.8%             |       |

**Mechanical Specification**

|                        |                                                                 |
|------------------------|-----------------------------------------------------------------|
| Cell Type              | N-Type ABC                                                      |
| Front Cover Mono glass | 3.2mm tempered glass                                            |
| Frame                  | Black anodized aluminum                                         |
| Cable                  | 4mm <sup>2</sup> (IEC) 12AWG(UL)<br>1200mm or Customized Length |
| No. of Cells           | 108(6*18)                                                       |
| Junction Box           | IP68, 3 bypass diodes                                           |
| Connector              | MC4 EVOA/MC4 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 <sub>sc</sub>  | + 0.05%/ °C |
| Temperature Coefficient of V <sub>oc</sub>  | - 0.22%/ °C |
| Temperature Coefficient of P <sub>max</sub> | - 0.26%/ °C |

**Installation Guide**

|                                               |                               |
|-----------------------------------------------|-------------------------------|
| Operation Temperature                         | -40°C - +85°C                 |
| Maximum Series Fuse Rating                    | 25A                           |
| Protection Class                              | Class II                      |
| V <sub>oc</sub> and I <sub>sc</sub> 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                   |