





# Neostar 2S Mono-Glass Module

## 440W-460W


Second Generation  
Comprehensive Upgrade:

 **Partial Shading Optimisation**

 **Better Temperature Coefficient**

 **High Temperature Restriction**

 **Micro-crack Resistance**

 **Higher Power**

 **Lower BOS**

 **Full Black Design**



Product  
Warranty



Performance  
Warranty



reddot winner 2023



Munich RE

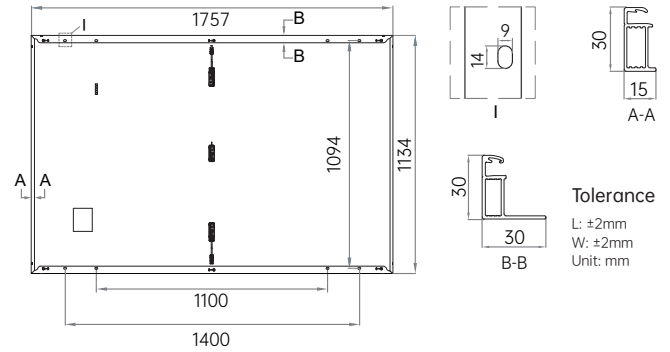
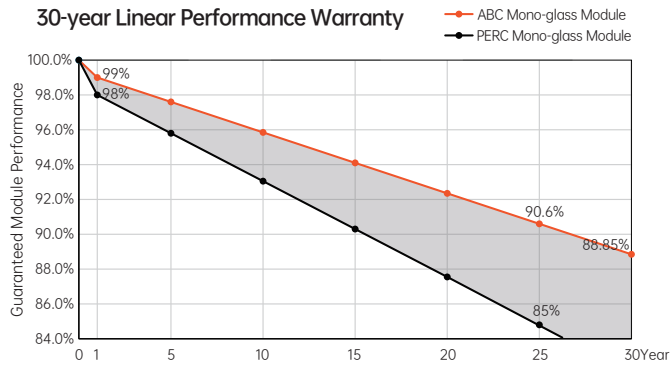


**460W**  
Output

**23.1%**  
Efficiency

**≤1%**  
First-year Degradation

**≤0.35%**  
Annual Degradation from Year 2-30



### 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%

| Module Type              | AIKO-A440-MAH54Mb |       | AIKO-A445-MAH54Mb |       | AIKO-A450-MAH54Mb |       | AIKO-A455-MAH54Mb |       | AIKO-A460-MAH54Mb |       |
|--------------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
|                          | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  |
| P <sub>max</sub> [W]     | 440               | 331   | 445               | 335   | 450               | 339   | 455               | 343   | 460               | 346   |
| V <sub>oc</sub> [V]      | 40.49             | 38.24 | 40.59             | 38.33 | 40.69             | 38.43 | 40.79             | 38.52 | 40.89             | 38.62 |
| V <sub>mp</sub> [V]      | 33.50             | 31.64 | 33.60             | 31.73 | 33.70             | 31.83 | 33.80             | 31.92 | 33.90             | 32.02 |
| I <sub>sc</sub> [A]      | 13.91             | 11.25 | 14.02             | 11.33 | 14.12             | 11.42 | 14.22             | 11.50 | 14.32             | 11.58 |
| I <sub>mp</sub> [A]      | 13.14             | 10.49 | 13.25             | 10.57 | 13.36             | 10.66 | 13.47             | 10.75 | 13.57             | 10.83 |
| <b>Module Efficiency</b> | <b>22.1%</b>      |       | <b>22.3%</b>      |       | <b>22.6%</b>      |       | <b>22.8%</b>      |       | <b>23.1%</b>      |       |

### Mechanical Specification

|                        |  |
|------------------------|--|
| Cell Type              | N-Type ABC   |
| Front Cover Mono glass | 3.2 mm tempered glass                                  |
| Frame                  | Black anodized aluminum                                |
| Cable                  | 4mm <sup>2</sup> (IEC) 12AWG(UL) 1200mm                |
| No. of Cells           | 108(6*18)  |
| Junction Box           | IP68,3 bypass diodes                                   |
| Connector              | MC4-Evo2   |
| Weight                 | 21.5kg   |
| Dimension              | 1757*1134*30mm   |
| Package Detail         | 36pcs per pallet / 216pcs per 20'GP / 936pcs per 40'HC |

### 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                   |

