



# Neostar 2P

Mono-Glass Module

## 450W-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



Munich RE

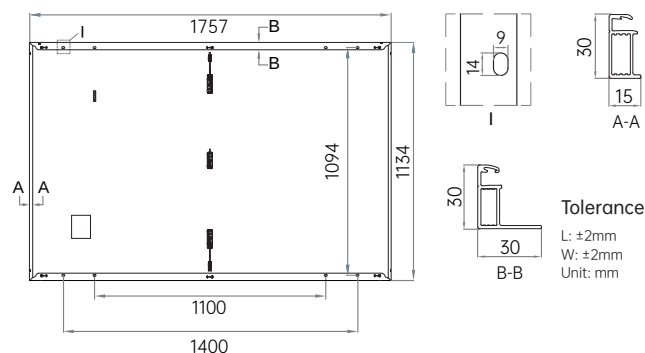
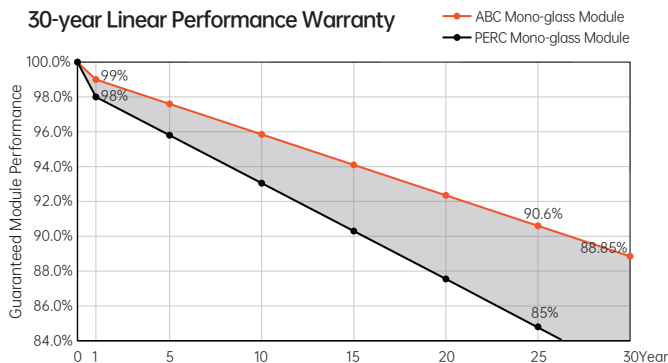


**470W**  
Output

**23.6%**  
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%

| Module Type          | AIKO-A450-MAH54Mw |       | AIKO-A455-MAH54Mw |       | AIKO-A460-MAH54Mw |       | AIKO-A465-MAH54Mw |       | AIKO-A470-MAH54Mw |       |
|----------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| Test Conditions      | 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   |
| 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]  | 14.21             | 11.49 | 14.31             | 11.57 | 14.41             | 11.66 | 14.51             | 11.74 | 14.61             | 11.82 |
| I <sub>mp</sub> [A]  | 13.44             | 10.72 | 13.55             | 10.81 | 13.66             | 10.90 | 13.76             | 10.98 | 13.87             | 11.07 |
| Module Efficiency    | 22.6%             |       | 22.8%             |       | 23.1%             |       | 23.3%             |       | 23.6%             |       |

**Mechanical Specification**

|                        |                                                        |
|------------------------|--------------------------------------------------------|
| Cell Type              | N-Type ABC                                             |
| Front Cover Mono glass | 3.2 mm tempered glass                                  |
| Frame                  | 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                   |

