

# NEOSTAR

3S+54 Dual-glass Module  
460W-485W

## Technical Features:

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



red dot winner 2023



Product  
Warranty



Performance  
Warranty



Munich RE



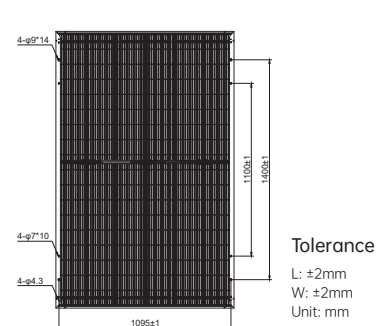
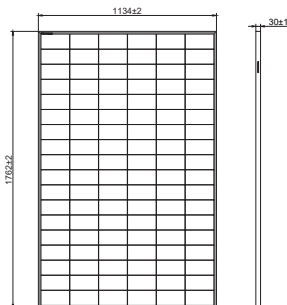
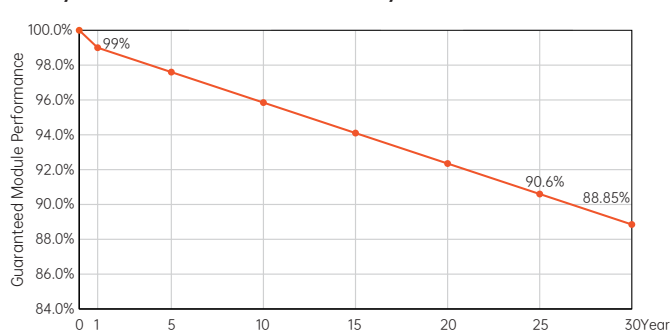
**485W**  
Output

**24.3%**  
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-A460-MCE54Db |       | AIKO-A465-MCE54Db |       | AIKO-A470-MCE54Db |       | AIKO-A475-MCE54Db |       | AIKO-A480-MCE54Db |       | AIKO-A485-MCE54Db |       |
|----------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| Test Conditions      | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  |
| P <sub>max</sub> [W] | 460               | 349   | 465               | 352   | 470               | 356   | 475               | 360   | 480               | 364   | 485               | 367   |
| V <sub>oc</sub> [V]  | 40.40             | 38.33 | 40.50             | 38.42 | 40.60             | 38.52 | 40.70             | 38.61 | 40.80             | 38.71 | 40.90             | 38.80 |
| V <sub>mp</sub> [V]  | 33.80             | 31.07 | 33.90             | 32.16 | 34.00             | 32.26 | 34.10             | 32.35 | 34.20             | 32.45 | 34.30             | 32.54 |
| I <sub>sc</sub> [A]  | 14.58             | 11.78 | 14.64             | 11.83 | 14.70             | 11.88 | 14.76             | 11.93 | 14.82             | 11.97 | 14.88             | 12.02 |
| I <sub>mp</sub> [A]  | 13.62             | 10.89 | 13.72             | 10.97 | 13.83             | 11.05 | 13.94             | 11.14 | 14.04             | 11.22 | 14.15             | 11.31 |
| Module Efficiency    | 23.0%             |       | 23.3%             |       | 23.5%             |       | 23.8%             |       | 24.0%             |       | 24.3%             |       |

### Product Specification

|                |                                                      |
|----------------|------------------------------------------------------|
| Cell type      | N-Type ABC                                           |
| Glass          | Dual glass, 2.0+2.0mm coated semi-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         | 24.5kg±3%                                            |
| Dimension      | 1762*1134*30mm                                       |
| Package Detail | 37pcs per pallet /222pcs per 20'GP/ 962pcs 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                      |
| Maximum System Voltage     | DC1500V                       |
| Maximum Static Loading     | +5400Pa/-2400Pa               |
| Hail Test                  | 25 mm diameter hail at 23 m/s |
| Fire Rating                | IEC Class C                   |

