

# NEOSTAR

3P54 Mono-Glass Module

470W-500W

## 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  
Extendable to 25years\*



Performance Warranty



Warranty partner

Munich RE 

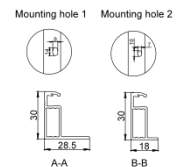
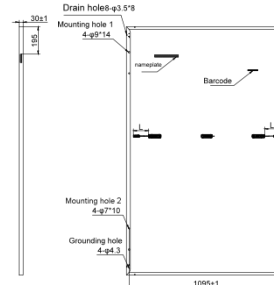
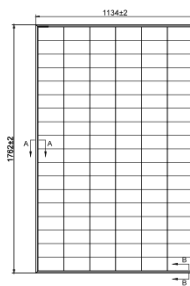
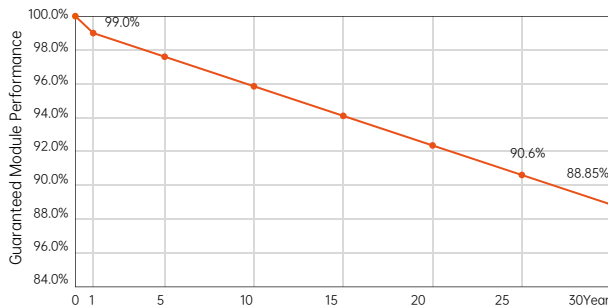
**500W**  
Output

**25.0%**  
Efficiency

**≤1%**  
First-year Degradation

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

### 30-year Linear Performance Warranty



#### Tolerance

L: ±2mm  
W: ±2mm  
Unit: mm

### 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-A470-MCE54Mw |       | AIKO-A475-MCE54Mw |       | AIKO-A480-MCE54Mw |       | AIKO-A485-MCE54Mw |       | AIKO-A490-MCE54Mw |       | AIKO-A495-MCE54Mw |       | AIKO-A500-MCE54Mw |       |
|----------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| Test Conditions      | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  |
| P <sub>max</sub> [W] | 470               | 356   | 475               | 360   | 480               | 364   | 485               | 367   | 490               | 371   | 495               | 375   | 500               | 379   |
| V <sub>oc</sub> [V]  | 40.70             | 38.61 | 40.80             | 38.71 | 40.90             | 38.80 | 41.00             | 38.90 | 41.10             | 38.99 | 41.20             | 39.09 | 41.30             | 39.18 |
| V <sub>mp</sub> [V]  | 34.30             | 32.54 | 34.40             | 32.64 | 34.50             | 32.73 | 34.60             | 32.83 | 34.70             | 32.92 | 34.80             | 33.02 | 34.90             | 33.11 |
| I <sub>sc</sub> [A]  | 14.72             | 11.89 | 14.76             | 11.93 | 14.80             | 11.96 | 14.84             | 11.99 | 14.88             | 12.02 | 14.92             | 12.06 | 14.96             | 12.09 |
| I <sub>mp</sub> [A]  | 13.71             | 10.96 | 13.81             | 11.04 | 13.92             | 11.13 | 14.02             | 11.21 | 14.13             | 11.29 | 14.23             | 11.37 | 14.33             | 11.46 |
| Module Efficiency    | 23.5%             |       | 23.8%             |       | 24.0%             |       | 24.3%             |       | 24.5%             |       | 24.8%             |       | 25.0%             |       |

### Product Specification

|                |                                                        |
|----------------|--------------------------------------------------------|
| Cell Type      | N-Type ABC                                             |
| Glass          | 3.2mm tempered glass                                   |
| Backsheet      | High weather resistant backsheet                       |
| 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      | Original MC4-EVO2A                                     |
| Weight         | 21.1kg±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     | Front 5400Pa Back 2400Pa      |
| Hail Test                  | 25 mm diameter hail at 23 m/s |
| Fire Rating                | IEC Class C                   |

