

# NEOSTAR

3S54 Mono-Glass Module

465W-495W

## Technical Features:

 Partial Shading Optimisation

 Better Temperature Coefficient

 High Temperature Restriction

 Micro-crack Resistance

 Higher Power

 Lower BOS

 More Aesthetic Values

 Infinite Technology



reddot winner 2023



Product  
Warranty



Performance  
Warranty



Warranty partner

Munich RE



Made in China

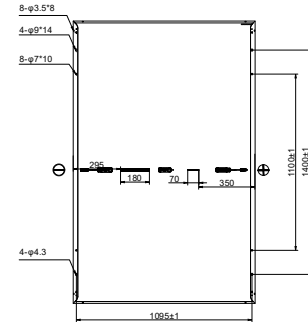
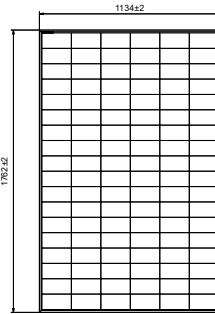
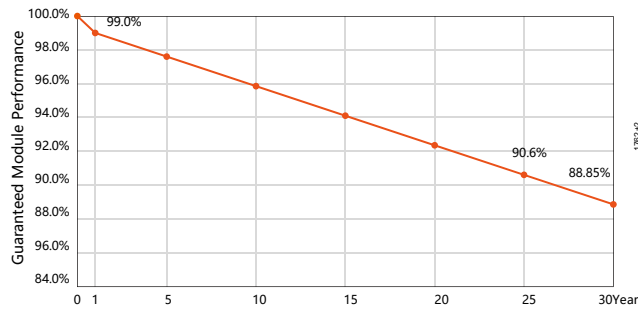
**495W**  
Output

**24.8%**  
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 Binning Tolerance: 0~ +3%

| Module Type          | AIKO-A465-MCE54Mb |       | AIKO-A470-MCE54Mb |       | AIKO-A475-MCE54Mb |       | AIKO-A480-MCE54Mb |       | AIKO-A485-MCE54Mb |       | AIKO-A490-MCE54Mb |       | AIKO-A495-MCE54Mb |       |
|----------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| Test Conditions      | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  |
| P <sub>max</sub> [W] | 465               | 352   | 470               | 356   | 475               | 360   | 480               | 364   | 485               | 367   | 490               | 371   | 495               | 375   |
| V <sub>oc</sub> [V]  | 40.60             | 38.52 | 40.70             | 38.61 | 40.80             | 38.71 | 40.90             | 38.80 | 41.00             | 38.90 | 41.10             | 38.99 | 41.20             | 39.09 |
| V <sub>mp</sub> [V]  | 34.20             | 32.45 | 34.30             | 32.54 | 34.40             | 32.64 | 34.50             | 32.73 | 34.60             | 32.83 | 34.70             | 32.92 | 34.80             | 33.02 |
| I <sub>sc</sub> [A]  | 14.69             | 11.87 | 14.72             | 11.89 | 14.76             | 11.93 | 14.80             | 11.96 | 14.84             | 11.99 | 14.88             | 12.02 | 14.92             | 12.06 |
| I <sub>mp</sub> [A]  | 13.60             | 10.87 | 13.71             | 10.96 | 13.81             | 11.04 | 13.92             | 11.13 | 14.02             | 11.21 | 14.13             | 11.29 | 14.23             | 11.37 |
| Module Efficiency    | 23.3%             |       | 23.5%             |       | 23.8%             |       | 24.0%             |       | 24.3%             |       | 24.5%             |       | <b>24.8%</b>      |       |

### Product Specification

|                |                                                                               |
|----------------|-------------------------------------------------------------------------------|
| Cell Type      | N-Type BC                                                                     |
| 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      | PV-KST4-EVO 2A/6I/ PV-KBT4-EVO 2A/6I<br>from Staubli Electrical Connectors AG |
| Weight         | 20.6kg±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

|                                                                    |                               |
|--------------------------------------------------------------------|-------------------------------|
| T <sub>98</sub> max                                                | 70°C                          |
| Module Operation Temperature                                       | -40°C - +85°C                 |
| Maximum Series Fuse Rating                                         | 25A                           |
| Protection Class                                                   | Class II                      |
| P <sub>MAX</sub> and 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                   |

