



# AIR Series

## 430W-450W


Draft

 **Partial Shading Optimisation**

 Better Temperature Coefficient

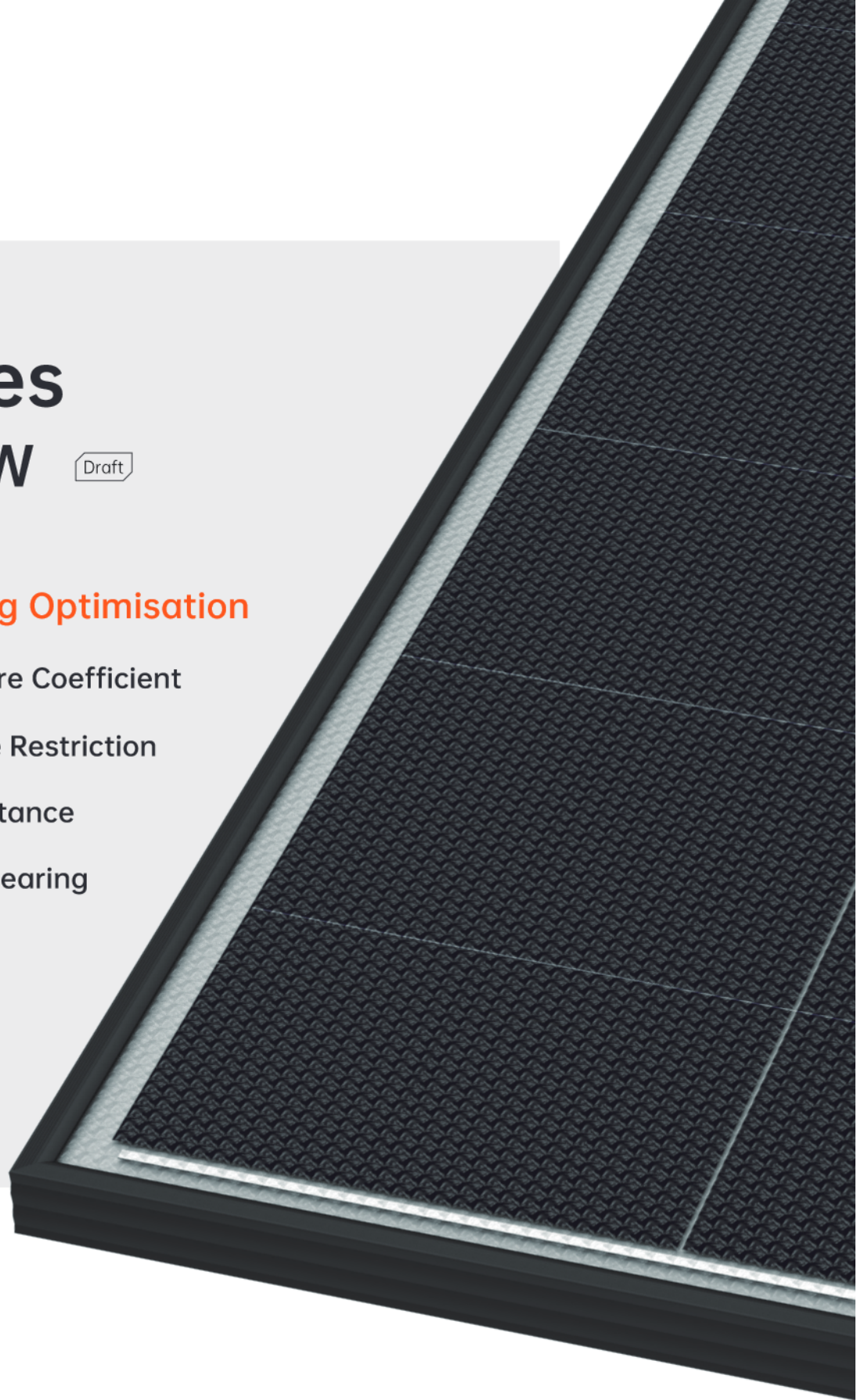
 High Temperature Restriction

 Micro-crack Resistance

 Lower roof load-bearing

 Higher Power

 Lower BOS



Product  
Warranty



Performance  
Warranty



reddot winner 2023



## 450W

Output

## 22.5%

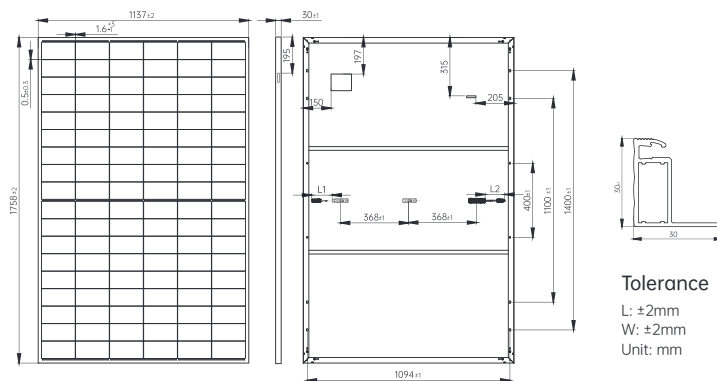
Efficiency

## ≤1%

First-year Degradation

## ≤0.35%

Annual Degradation from Year



### 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-A430-MAH54Tm |       | AIKO-A435-MAH54Tm |       | AIKO-A440-MAH54Tm |       | AIKO-A445-MAH54Tm |       | AIKO-A450-MAH54Tm |       |
|--------------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
|                          | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  | STC               | NOCT  |
| P <sub>max</sub> [W]     | 430               | 326   | 435               | 330   | 440               | 334   | 445               | 338   | 450               | 341   |
| V <sub>oc</sub> [V]      | 40.27             | 38.22 | 40.37             | 38.32 | 40.47             | 38.41 | 40.57             | 38.51 | 40.67             | 38.60 |
| V <sub>mp</sub> [V]      | 34.03             | 32.30 | 34.13             | 32.39 | 34.23             | 32.49 | 34.33             | 32.58 | 34.43             | 32.68 |
| I <sub>sc</sub> [A]      | 13.66             | 11.02 | 13.75             | 11.09 | 13.84             | 11.16 | 13.93             | 11.24 | 14.02             | 11.31 |
| I <sub>mp</sub> [A]      | 12.54             | 10.11 | 12.75             | 10.20 | 12.86             | 10.29 | 12.97             | 10.38 | 13.08             | 10.46 |
| <b>Module Efficiency</b> | <b>21.5%</b>      |       | <b>21.8%</b>      |       | <b>22.0%</b>      |       | <b>22.3%</b>      |       | <b>22.5%</b>      |       |

### Mechanical Specification

|                |  |
|----------------|--|
| Cell Type      | N-Type ABC   |
| Front Sheet    | Transparent  |
| Back Sheet     | White sheet  |
| Frame          | Black anodized aluminum                                  |
| Cable          | 4mm <sup>2</sup> (IEC) 12AWG(UL) 1200mm                  |
| No. of Cells   | 108(6*18)  |
| Junction Box   | IP68, 3bypass diodes                                     |
| Connector      | MC4-Evo2   |
| Weight         | 9.0kg±3%   |
| Dimension      | 1758*1137*30mm   |
| Package Detail | 36pcs per pallet / 216pcs per 20' GP / 936pcs per 40' HC |

### Temperature Ratings (STC)

|   |             |
|---|-------------|
| Temperature Coefficient of I <sub>sc</sub>  | + 0.04%/ °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 3600Pa Back 2400Pa      |
| Hail Test                                     | 25 mm diameter hail at 23 m/s |
| Fire Rating                                   | IEC Class C                   |

