




Neostar 2S Mono-Glass Module

440W-460W

Second Generation
Comprehensive Upgrade:

 **Partial Shading Optimisation**

 **Better Temperature Coefficient**

 **High Temperature Restriction**

 **Micro-crack Resistance**

 **Higher Power**

 **Lower BOS**

 **Full Black Design**



Product
Warranty



Performance
Warranty



reddot winner 2023



Munich RE

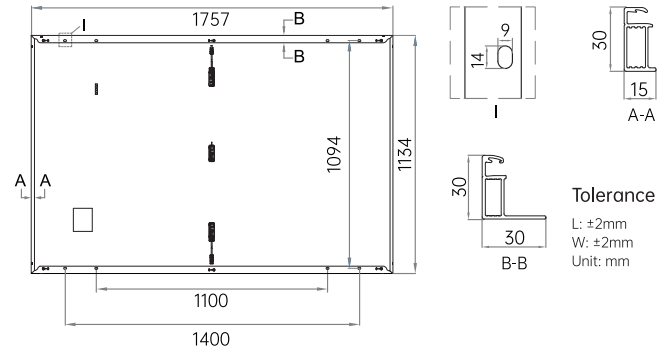
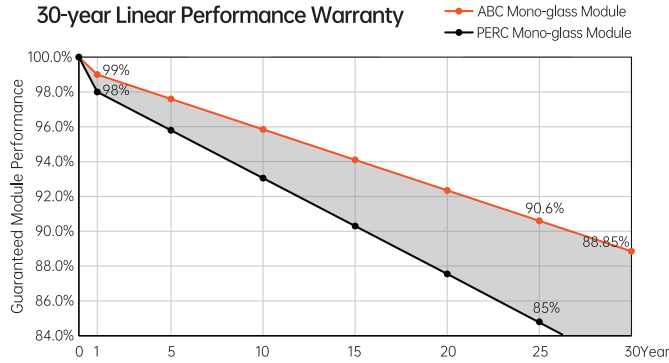


460W
Output

23.1%
Efficiency

≤1%
First-year Degradation

≤0.35%
Annual Degradation from Year 2-30



Electrical Characteristics (STC: AM1.5 1000W/m² 25°C NOCT: AM1.5 800W/m² 20°C 1m/s)

Power Tolerance: 0~ +3%

| Module Type | AIKO-A440-MAH54Mb | | AIKO-A445-MAH54Mb | | AIKO-A450-MAH54Mb | | AIKO-A455-MAH54Mb | | AIKO-A460-MAH54Mb | |
|--------------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|
| | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| P _{max} [W] | 440 | 331 | 445 | 335 | 450 | 339 | 455 | 343 | 460 | 346 |
| V _{oc} [V] | 40.49 | 38.24 | 40.59 | 38.33 | 40.69 | 38.43 | 40.79 | 38.52 | 40.89 | 38.62 |
| V _{mp} [V] | 33.50 | 31.64 | 33.60 | 31.73 | 33.70 | 31.83 | 33.80 | 31.92 | 33.90 | 32.02 |
| I _{sc} [A] | 13.91 | 11.25 | 14.02 | 11.33 | 14.12 | 11.42 | 14.22 | 11.50 | 14.32 | 11.58 |
| I _{mp} [A] | 13.14 | 10.49 | 13.25 | 10.57 | 13.36 | 10.66 | 13.47 | 10.75 | 13.57 | 10.83 |
| Module Efficiency | 22.1% | | 22.3% | | 22.6% | | 22.8% | | 23.1% | |

Mechanical Specification

| | |
|------------------------|--|
| Cell Type | N-Type ABC |
| Front Cover Mono glass | 3.2 mm tempered glass |
| Frame | Black anodized aluminum |
| Cable | 4mm ² (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 _{sc} | + 0.05%/ °C |
| Temperature Coefficient of V _{oc} | - 0.22%/ °C |
| Temperature Coefficient of P _{max} | - 0.26%/ °C |

Installation Guide

| | |
|---|-------------------------------|
| Operation Temperature | -40°C - +85°C |
| Maximum Series Fuse Rating | 25A |
| Protection Class | Class II |
| V _{oc} and I _{sc} 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 |

