



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

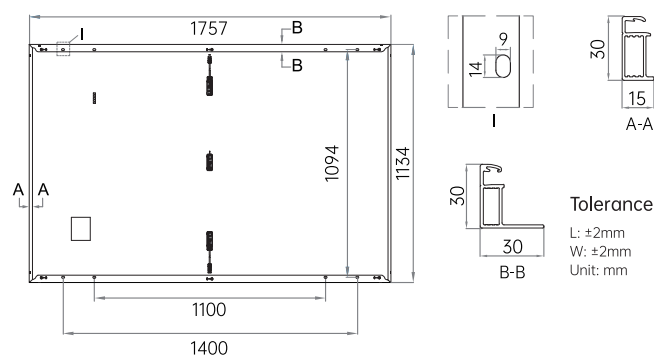
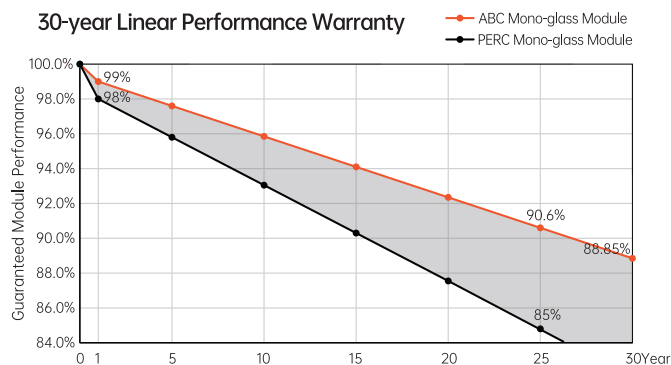


Munich RE 

460W
Output

23.1%
Efficiency

 $\leq 1\%$
First-year Degradation

 $\leq 0.35\%$
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	
Test Conditions	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	$\pm 3\%$
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

