








NEOSTAR

2P Mono-Glass Module
450W-485W

Technical Features:

-  Partial Shading Optimisation
-  Better Temperature Coefficient
-  High Temperature Restriction
-  Micro-crack Resistance
-  Higher Power
-  Lower BOS
-  More Aesthetic Values



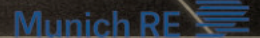
reddot winner 2023



Product Warranty
(Extendable to 25years*)



Performance
Warranty



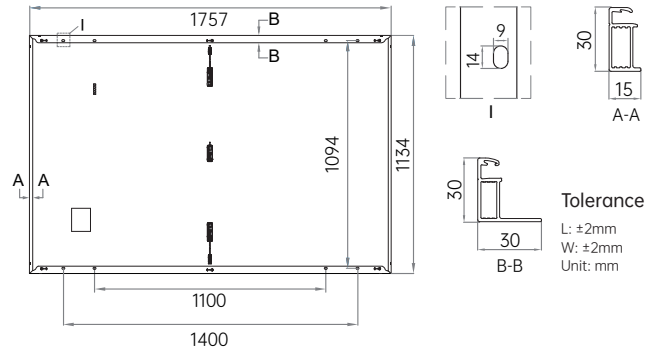
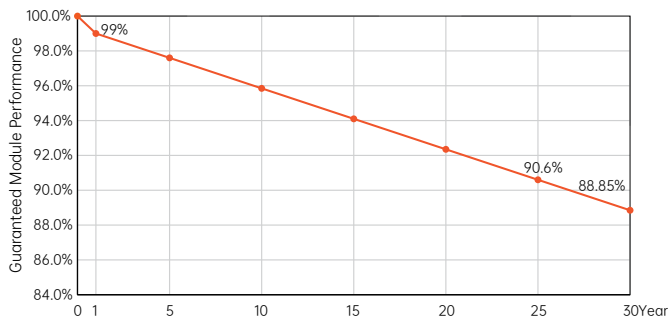
485W
Output

24.3%
Efficiency

≤1%
First-year Degradation

≤0.35%
Annual Degradation from Year 2-30

30-year Linear Performance Warranty



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-A450-MAH54Mw		AIKO-A455-MAH54Mw		AIKO-A460-MAH54Mw		AIKO-A465-MAH54Mw		AIKO-A470-MAH54Mw		AIKO-A475-MAH54Mw		AIKO-A480-MAH54Mw		AIKO-A485-MAH54Mw	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
P_{max} [W]	450	339	455	343	460	346	465	350	470	354	475	358	480	361	485	365
V_{oc} [V]	40.94	38.66	41.00	38.72	41.06	38.77	41.12	38.83	41.18	38.89	41.24	38.94	41.30	39.00	41.36	39.06
V_{mp} [V]	34.50	32.58	34.56	32.64	34.62	32.69	34.68	32.75	34.74	32.81	34.80	32.86	34.86	32.92	34.92	32.98
I_{sc} [A]	14.12	11.42	14.22	11.50	14.25	11.52	14.29	11.55	14.32	11.58	14.35	11.60	14.38	11.63	14.41	11.66
I_{mp} [A]	13.05	10.41	13.17	10.51	13.29	10.61	13.41	10.71	13.54	10.80	13.66	10.90	13.78	10.99	13.90	11.09
Module Efficiency	22.6%		22.8%		23.1%		23.3%		23.6%		23.8%		24.1%		24.3%	

Mechanical Specification

Cell Type	N-Type ABC
Front Cover Mono glass	3.2 mm tempered glass
Frame	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	40 mm diameter hail at 27.5 m/s
Fire Rating	IEC Class C



Battery Storage

PGEM

- Quick installation
- Remote monitoring
- Flexible remote upgrade
- Auto-addressing for master/slaves set up
- Parallel up to 32 modules
- Wide range inverter compatibility
- 1C rate continuous charge/discharge
- Multi protection to avoid over discharge
- Smart BMS management for longer lifespan
- Active balancing charging, low self consumption



Specifications

Model	PGEM
Cell Type	LFP
Rated Power	5.12kWh
Rated Capacity	100Ah
Rated Voltage	51.2V
Charge Voltage	56.5V
Max. Charge/Discharge Current	100A
Discharge Peak Current	105A / 15s, 150A / 0.5s
Parallel	Up to 32 units parallelable w/o extra device needed, slave battery drops offline or come back alive does not affect system running
IP Level	IP20
Dimension(W*D*H mm)	428*640*166mm
Weight	58kg/127.9lbs
Communication	CAN/RS485
Compatible Inverter	Victron, Luxpower, Deye, Voltronic, SMA Goodwe, Growatt, Sofar, Solark, SRNE, Must
Humidity	5%~85% RH (No condensation)
Work Temperature	-20 ~ +55 °C
Storage Temperature	-10 ~ +35 °C
Remote Maintenance	Flexible remote upgrade, remote monitoring Original firmware backup to prevent upgrade failure
Warranty *	10 years, 6000 cycles
Certification	CE UN38.3; IEC62619
Protection	Overcharge/discharge/current/voltage/temperature protection Short circuit protection, Reverse connection protection Stronger active balance, Low SOC protection

ECO HYBRID

Single-Phase

SNA 3-6K

- Off-grid seamless switching
- 2 MPPTs, Max. PV input: 9.6kW
- Wide PV input voltage range: 100~500V
- Supports up to 16pcs in parallel
- Max. charging and discharging current 140A
- Dedicated Port: Supports generator, AC coupling or smart load management for enhanced stability
- 24/7 real-time monitoring via LUX app with worry-free updates



Specifications

Input (PV DC)	SNA 3000W	SNA 4000W	SNA 5000W	SNA 6000W
Max. PV input power(W)	6000 (3000/3000)	8000 (4000/4000)	8000 (4000/4000)	9600 (4800/4800)
Rated PV input voltage(V)	320			
Number of independent MPPT inputs	2/(1:1)			
PV input voltage range(V)	100~500			
MPPT voltage range(V)	120~385			
Start-up voltage(V)	100			
Max. PV input current per MPPT(A)	17/17			
Max. PV short-circuit current input per MPPT(A)	25/25			
Battery				
Compatible battery type	Lithium-ion/Lead-Acid			
Rated battery voltage(V)	48			
Battery voltage range(V)	38.4~60			
Max. charge/discharge current(A)	70/70	90/90	110/110	140/140
Max. charge/discharge power(W)	3000	4000	5000	6000
Recommend capacity of battery per inverter	>100AH	>200AH	>200AH	>200AH
Force wake up battery from PV function	YES			
Force wake up battery from Grid function	YES			
Grid				
Rated AC voltage(V)	230			
Rated AC frequency(Hz)	50/60			
Rated AC output current(A)	13.5	17.5	22	26.5
Rated AC output power(W)	3000	4000	5000	6000
Max. AC input power(W)	8000			
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)			
THDI	<5%			
Max. continuous AC passthrough current(A)	35			40
UPS				
Rated output power(W)	3000	4000	5000	6000
Rated output voltage(V)	230			
Rated output current(A)	13.5	17.5	22	26.5
Rated output frequency(Hz)	50/60			
Surge power, duration	2Pn, <5s			
Switching time	<10ms@Single/<20ms@Parallel			
Wave form	Sine wave			
THDV	3%			
Efficiency				
Max. MPPT efficiency	99.9%			
Max. efficiency	93.0%			
Max. charge efficiency	93.0%			
Max. discharge efficiency	93.0%			
Protection				
Over current/voltage protection	YES			
AC Short-circuit current protection	YES			
Grid monitoring	YES			
AC Surge protection	Type III			
Battery reverse polarity protection	YES			
General				
Dimensions(W*H*D)	330*505*135mm/13*19.9*5.3inch			
Weight	14.5kg/32lbs			
Ingress protection rating	IP20			
Operating environment temperature range(°C)	0~50			
Storage temperature range(°C)	-15~60			
Relative humidity	5%~95%			
Display & Communication interface	LCD+LED, RS485/Wi-Fi/CAN			
Warranty	2 years			
Cooling method	Smart Cooling			
Topology	Transformer-less			
Altitude	<2000m			
Noise emission(typical)	<50dB			
Standards & Certification				
IEC 62109-1, IEC 61000, IEC62040/EN62040, IEC62109, NRS 097-2-1				