

Anern® 亚能

SOLAR SOLUTIONS, GO SOLAR WITH ANERN



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SOLAR ENERGY STORAGE SERIES

MEGA PROJECTS

>>> Anern has successfully completed hundreds of mega government projects in more than 100 countries in the past 10 years.



PRODUCTION LINE

>>> Anern has specialized production lines, through international standard management and strict quality control to ensure the stable-performance and high-quality solar products.



HONOR & CERTIFICATES

>>> Anern has been awarded with many honors since its establishment, and owns over 20 patents for self-developed products.



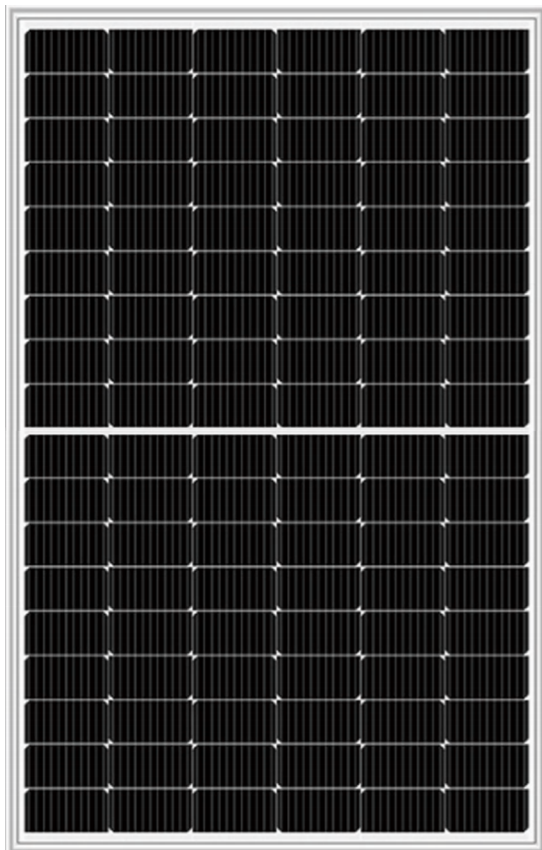
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- >>> Hybrid Solar Inverter / P15-P26
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HALF CELL MONO PERC SOLAR PANEL

(390W-410W)



Features of Module



Multiple Busbars (MBB)
Densely distributed grid lines, uniform load, multi-busbars design. Output power increased by more than 5W.



Lossless cut
Lossless cutting technology, no mechanical damage, smooth cutting surface without burrs. Low cell cracking risks, micro-cracking is reduced by more than 50%.



Half-cut
Current density is reduced by 1/2, Internal power loss reduced to 1/4 of conventional modules. Rated output power increased by 5~10W.



New Welding Wire
Adopt round wire solder ribbon, low shading area. Multiple reflections of incident light, power increased by 1-2W.



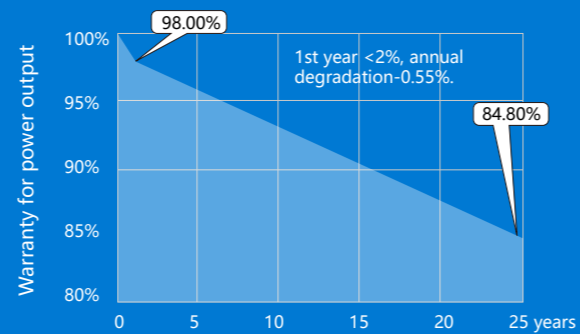
Shading, not compromising energy
Up-down symmetrical parallel module design Effectively reduce current mismatch due to shading.



High-Density Encapsulation Technology
Adopts advanced high-density encapsulation technology to ensure the perfect balance of efficiency and reliability Module efficiency increased by more than 0.15%.

Linear Power Output Warranty

15 15-year warranty for materials. **25** 25-year warranty for linear power output.



Quality Management System and Product Certification

IEC61215/61730, IEC62804(PID), IEC61701(Salt), IEC62716 (Ammonia), IEC60068-2-68(Sand)
ISO 9001:2015/quality management system
ISO 14001:2015/ environmental management system
ISO 45001:2018/occupation health safety management system
ISO 50001:2011/ energy management system
IEC TS 62941—2016/ PV industry quality management system



Product Data Sheet

ELECTRICAL CHARACTERISTICS (STC)

Module Number: ANM10-54PH	390	395	400	405	410
Maximum Power Pmax (W)	390	395	400	405	410
Open circuit voltage · Voc (V)	36.7	36.8	37.0	37.1	37.3
Short circuit current Isc (A)	13.40	13.50	13.60	13.70	13.79
Voltage at Maximum Power Vmp (V)	30.7	30.9	31.0	31.2	31.3
Current at Maximum Power Imp (A)	12.71	12.81	12.91	13.01	13.10
Module efficiency-η (%)	20.0	20.2	20.5	20.7	21.0

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum power ·Pm (W)	292	296	300	304	308
Open circuit voltage ·Voc (V)	33.7	33.8	34.0	34.1	34.3
Short circuit current Isc (A)	10.93	11.01	11.10	11.18	11.27
Voltage at maximum power point·Vm (V)	27.9	28.0	28.2	28.3	28.5
Current at maximum power point·Im (A)	10.48	10.56	10.65	10.73	10.82

* STC: Irradiation 1000W/m²; AM1.5; environmental temperature 25°C tested according to EN 60904-3;
* NMOT: irradiation 800W/m²; wind speed 1m/s; environmental temperature 20°C
* Pm tolerance: 0~+5W ; power test uncertainty: ±3%; Voc[V], Isc[A], Vm[V] and Im[A] test tolerance: +3%

MECHANICAL PARAMETERS

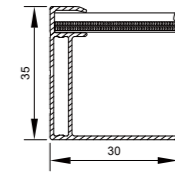
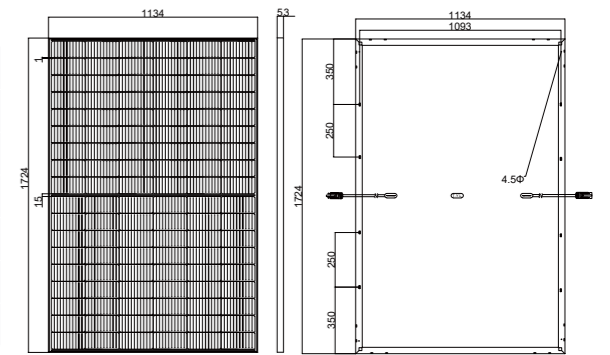
Size	1724x1134x30mm (LxWxH)
Weight	21.5kg
Front glass	3.2mm toughened glass
Cell	Monocrystalline PERC 182x91mm, 54*2pcs
Backplate	High weather resistance
Frame	Anodic alumina profile
Junction box	IP68, TUV, 3diodes
Cable	4mm ² , +400, -200/ ± 1400mm Wire length can be customized
Connector	MC4 compatible/original EVO2
Packaging mode	31pcs/pack;936pcs/40HQ

TEMPERATURE PARAMETERS

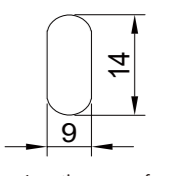
NMOT	42.30 °C (±2°C)
Open circuit voltage temperature coefficient	-0.27%/°C
Short circuit current temperature coefficient	+0.04%/°C
Maximum power temperature coefficient	-0.34%/°C

MAXIMUM RATED PARAMETERS

Maximum system voltage (V)	DC1500/1000 (IEC)
Maximum fuse rated current (A)	20
Maximum front static load (Pa)	5400
Working temperature (°C)	-40~+85
Hail resistance	Maximum diameter 25mm, impact speed 23m/s



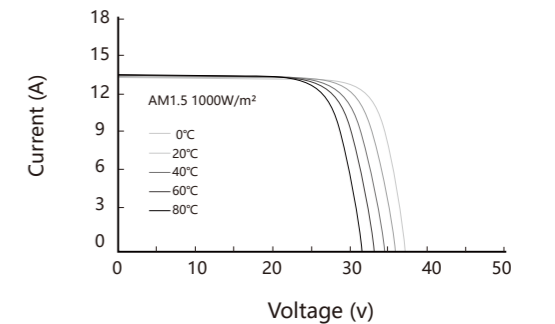
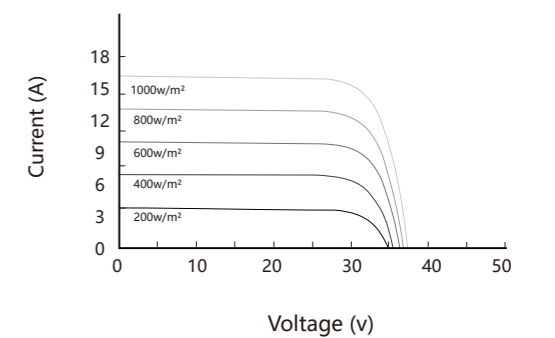
SECTION: A-A



Location map of mounting holes

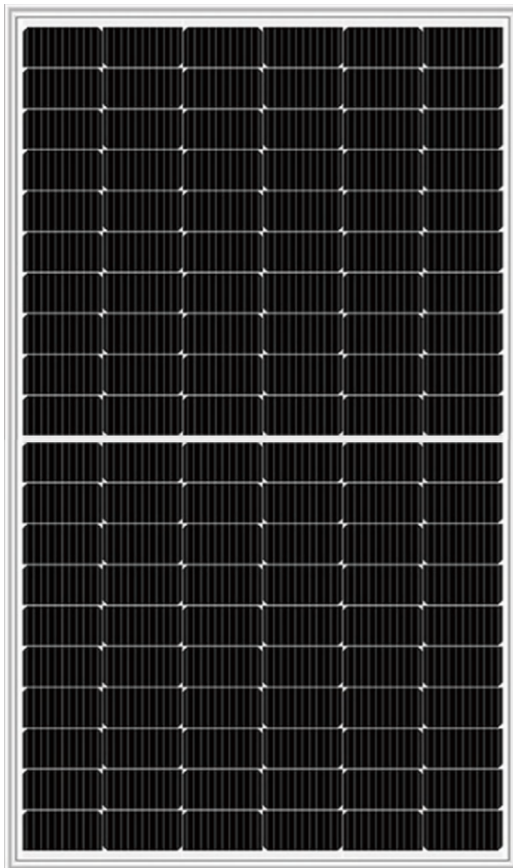
I-V Curve

Cell temperature 25°C



HALF CELL MONO PERC SOLAR PANEL

(430W-460W)



Features of Module



Multiple Busbars (MBB)
Densely distributed grid lines, uniform load, multi-busbars design. Output power increased by more than 5W.



Lossless cut
Lossless cutting technology, no mechanical damage, smooth cutting surface without burrs. Low cell cracking risks, micro-cracking is reduced by more than 50%.



Half-cut
Current density is reduced by 1/2, Internal power loss reduced to 1/4 of conventional modules. Rated output power increased by 5~10W.



New Welding Wire
Adopt round wire solder ribbon, low shading area. Multiple reflections of incident light, power increased by 1-2W.



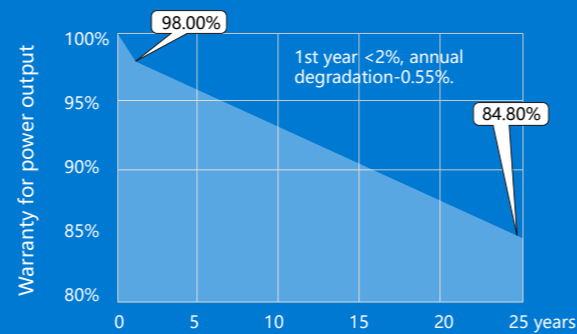
Shading, not compromising energy
Up-down symmetrical parallel module design. Effectively reduce current mismatch due to shading.



High-Density Encapsulation Technology
Adopts advanced high-density encapsulation technology to ensure the perfect balance of efficiency and reliability. Module efficiency increased by more than 0.15%.

Linear Power Output Warranty

15 15-year warranty for materials. **25** 25-year warranty for linear power output.



Quality Management System and Product Certification

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ISO 45001:2018/occupation health safety management system
ISO 50001:2011/ energy management system
IEC TS 62941—2016/ PV industry quality management system



Product Data Sheet

ELECTRICAL CHARACTERISTICS (STC)

Module Number: ANM10-60PH	430	435	440	445	460
Maximum Power Pmax (W)	430	435	440	445	460
Open circuit voltage · Voc (V)	40.7	40.8	41.0	41.1	41.55
Short circuit current Isc (A)	13.59	13.67	13.74	13.82	14.05
Voltage at Maximum Power Vmp (V)	33.9	34.1	34.3	34.5	35.07
Current at Maximum Power Imp (A)	12.69	12.77	12.84	12.91	13.12
Module efficiency-η (%)	19.9	20.1	20.3	20.6	21.25

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum power · Pm (W)	327	330	333	336	346
Open circuit voltage · Voc (V)	38.2	38.3	38.4	38.5	38.89
Short circuit current Isc (A)	10.91	10.95	10.99	11.03	11.16
Voltage at maximum power point·Vm (V)	31.9	32.1	32.2	32.4	32.82
Current at maximum power point·Im (A)	10.26	10.30	10.35	10.40	10.54

* STC: Irradiation 1000W/m²; AM1.5; environmental temperature 25°C; tested according to EN 60904-3;
* NMOT: irradiation 800W/m²; wind speed 1m/s; environmental temperature 20°C
* Pm tolerance: 0~+5W; power test uncertainty: ±3%; Voc[V], Isc[A], Vm[V] and Im[A] test tolerance: +3%

MECHANICAL PARAMETERS

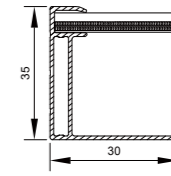
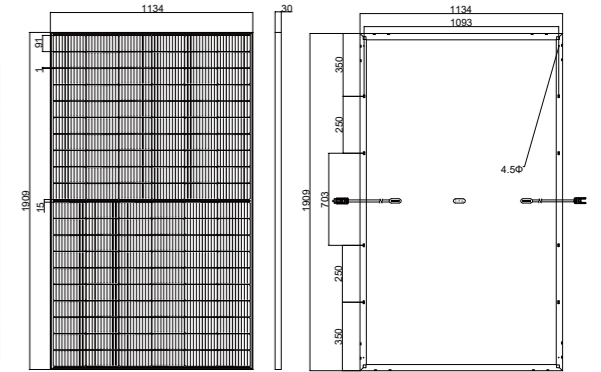
Size	1909x1134x30mm (LxWxH)
Weight	23.1kg
Front glass	3.2mm toughened glass
Cell	Monocrystalline PERC 182x91mm,60*2pcs
Backplate	High weather resistance
Frame	Anodic alumina profile
Junction box	IP68, TUV, 3diodes
Cable	4mm ² , +400, -200/ ± 1400mm Wire length can be customized
Connector	MC4 compatible/original EVO2
Packaging mode	31pcs/pack;864pcs/40HQ

TEMPERATURE PARAMETERS

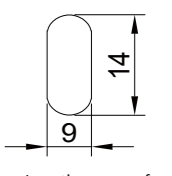
NMOT	42.30 °C (±2°C)
Open circuit voltage temperature coefficient	-0.27%/°C
Short circuit current temperature coefficient	+0.04%/°C
Maximum power temperature coefficient	-0.34%/°C

MAXIMUM RATED PARAMETERS

Maximum system voltage (V)	DC1500/1000 (IEC)
Maximum fuse rated current (A)	20
Maximum front static load (Pa)	5400
Working temperature (°C)	-40~+85
Hail resistance	Maximum diameter 25mm, impact speed 23m/s



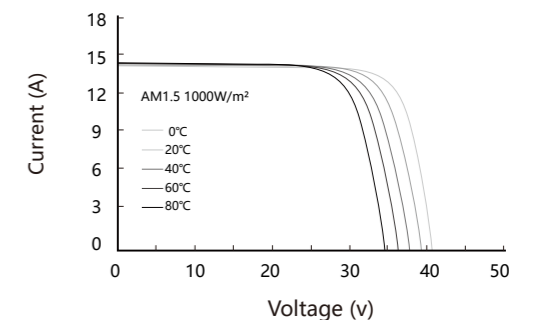
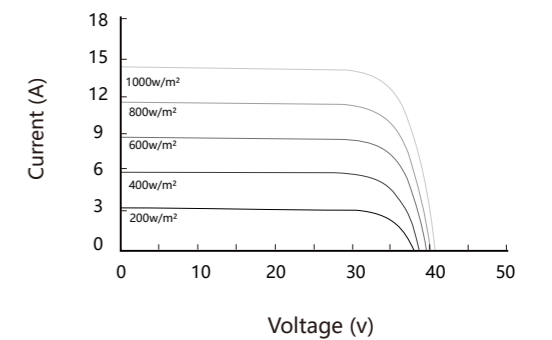
SECTION: A-A



Location map of mounting holes

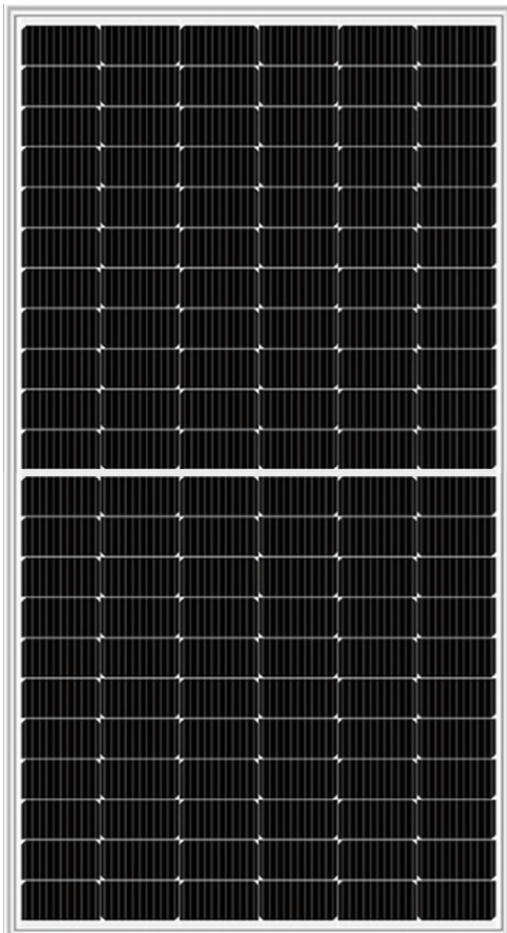
I-V Curve

Cell temperature 25°C



HALF CELL MONO PERC SOLAR PANEL

(490W-510W)



Features of Module



Multiple Busbars (MBB)
Densely distributed grid lines, uniform load, multi-busbars design. Output power increased by more than 5W.



Lossless cut
Lossless cutting technology, no mechanical damage, smooth cutting surface without burrs. Low cell cracking risks, micro-cracking is reduced by more than 50%.



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Current density is reduced by 1/2, Internal power loss reduced to 1/4 of conventional modules. Rated output power increased by 5~10W.



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Adopt round wire solder ribbon, low shading area. Multiple reflections of incident light, power increased by 1-2W.



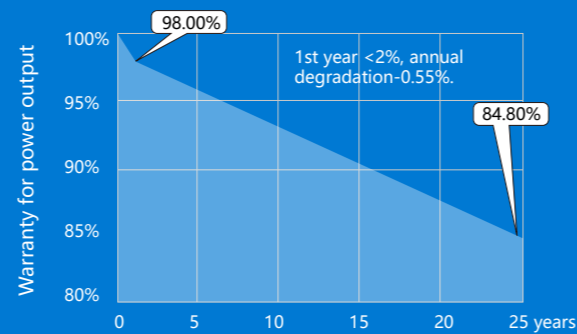
Shading, not compromising energy
Up-down symmetrical parallel module design. Effectively reduce current mismatch due to shading.



High-Density Encapsulation Technology
Adopts advanced high-density encapsulation technology to ensure the perfect balance of efficiency and reliability. Module efficiency increased by more than 0.15%.

Linear Power Output Warranty

15 15-year warranty for materials. **25** 25-year warranty for linear power output.



Quality Management System and Product Certification

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ISO 45001:2018/occupation health safety management system
ISO 50001:2011/ energy management system
IEC TS 62941—2016/ PV industry quality management system



Product Data Sheet

ELECTRICAL CHARACTERISTICS (STC)

Module Number: ANM10-66PH	490	495	500	505	510
Maximum Power Pmax (W)	490	495	500	505	510
Open circuit voltage · Voc (V)	45.3	45.5	45.7	45.8	45.9
Short circuit current Isc (A)	13.79	13.86	13.92	13.99	14.04
Voltage at Maximum Power Vmp (V)	38.0	38.2	38.3	38.5	38.7
Current at Maximum Power Imp (A)	12.89	12.97	13.05	13.12	13.18
Module efficiency-η (%)	20.6	20.8	21.1	21.3	21.7

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum power · Pm (W)	370	373	377	381	385
Open circuit voltage · Voc (V)	42.5	42.6	42.8	42.9	43.0
Short circuit current Isc (A)	11.12	11.19	11.26	11.33	11.37
Voltage at maximum power point·Vm (V)	35.7	35.9	36.0	36.1	36.3
Current at maximum power point·Im (A)	10.36	10.41	10.48	10.56	10.61

* STC: Irradiation 1000W/m²; AM1.5; environmental temperature 25°C; tested according to EN 60904-3;
* NMOT: irradiation 800W/m²; wind speed 1m/s; environmental temperature 20°C
* Pm tolerance: 0~+5W; power test uncertainty: ±3%; Voc[V], Isc[A], Vm[V] and Im[A] test tolerance: +3%

MECHANICAL PARAMETERS

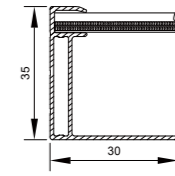
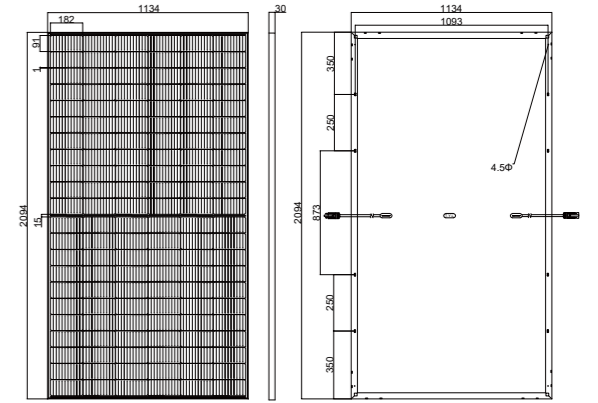
Size	2094x1134x30mm (LxWxH)
Weight	25.1kg
Front glass	3.2mm toughened glass
Cell	Monocrystalline PERC 182x182mm
Backplate	High weather resistance
Frame	Anodic alumina profile
Junction box	IP68, TUV, 3diodes
Cable	4mm ² , +400, -200/ ± 1400mm Wire length can be customized
Connector	MC4 compatible/original EVO2
Packaging mode	31pcs/pack;682pcs/40HQ

TEMPERATURE PARAMETERS

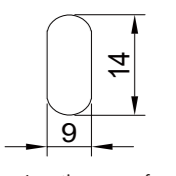
NMOT	42.30 °C (±2°C)
Open circuit voltage temperature coefficient	-0.27%/°C
Short circuit current temperature coefficient	+0.04%/°C
Maximum power temperature coefficient	-0.34%/°C

MAXIMUM RATED PARAMETERS

Maximum system voltage (V)	DC1500/1000 (IEC)
Maximum fuse rated current (A)	20
Maximum front static load (Pa)	5400
Working temperature (°C)	-40~+85
Hail resistance	Maximum diameter 25mm, impact speed 23m/s



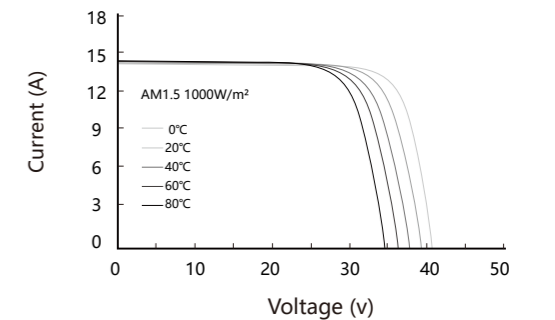
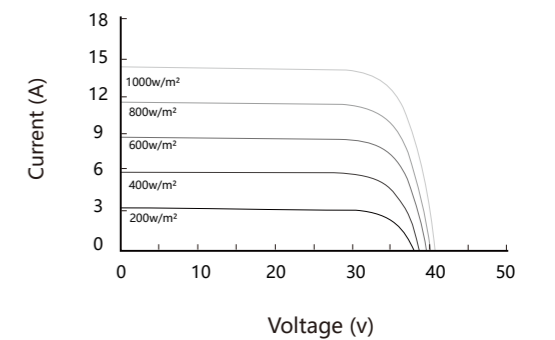
SECTION: A-A



Location map of mounting holes

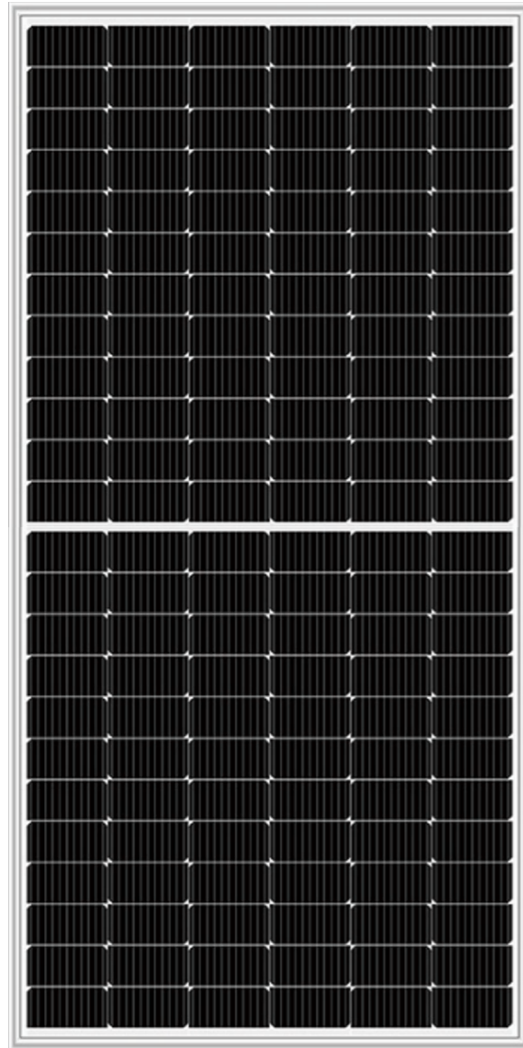
I-V Curve

Cell temperature 25°C



HALF CELL MONO PERC SOLAR PANEL

(535W-555W)

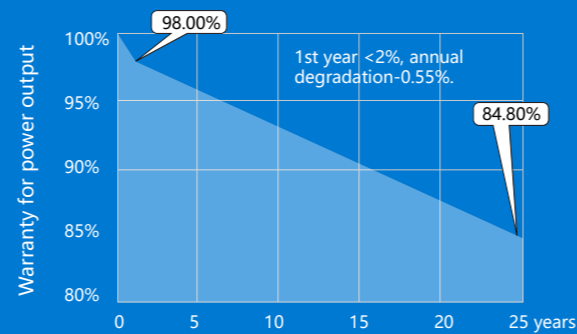


Features of Module

- Multiple Busbars (MBB)**
 Densely distributed grid lines, uniform load, multi-busbars design. Output power increased by more than 5W.
- Lossless cut**
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- Half-cut**
 Current density is reduced by 1/2, Internal power loss reduced to 1/4 of conventional modules. Rated output power increased by 5~10W.
- New Welding Wire**
 Adopt round wire solder ribbon, low shading area. Multiple reflections of incident light, power increased by 1-2W.
- Shading, not compromising energy**
 Up-down symmetrical parallel module design. Effectively reduce current mismatch due to shading.
- High-Density Encapsulation Technology**
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Linear Power Output Warranty

15 15-year warranty for materials. **25** 25-year warranty for linear power output.



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IEC61215/61730, IEC62804(PID), IEC61701(Salt), IEC62716 (Ammonia), IEC60068-2-68(Sand)
 ISO 9001:2015/quality management system
 ISO 14001:2015/ environmental management system
 ISO 45001:2018/occupation health safety management system
 ISO 50001:2011/ energy management system
 IEC TS 62941—2016/ PV industry quality management system



Product Data Sheet

ELECTRICAL CHARACTERISTICS (STC)

Module Number: ANM10-72PH	535	540	545	550	550
Maximum Power Pmax (W)	535	540	545	550	550
Open circuit voltage · Voc (V)	49.4	49.5	49.7	49.8	50.0
Short circuit current Isc (A)	13.78	13.85	13.92	13.98	14.04
Voltage at Maximum Power Vmp (V)	41.5	41.7	41.8	42.0	42.1
Current at Maximum Power Imp (A)	12.90	12.97	13.04	13.12	13.19
Module efficiency-η (%)	20.9	21.1	21.3	21.5	21.7

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum power ·Pm (W)	400	404	407	411	415
Open circuit voltage ·Voc (V)	46.4	46.5	46.7	46.8	47.0
Short circuit current Isc (A)	11.14	11.20	11.25	11.31	11.35
Voltage at maximum power point·Vm (V)	38.6	38.7	38.8	39.0	39.1
Current at maximum power point·Im (A)	10.38	10.43	10.49	10.56	10.61

* STC: Irradiation 1000W/m²; AM1.5; environmental temperature 25°C tested according to EN 60904-3;
 * NMOT: irradiation 800W/m²; wind speed 1m/s; environmental temperature 20°C
 * Pm tolerance: 0~+5W; power test uncertainty: ±3%; Voc[V], Isc[A], Vm[V] and Im[A] test tolerance: +3%

MECHANICAL PARAMETERS

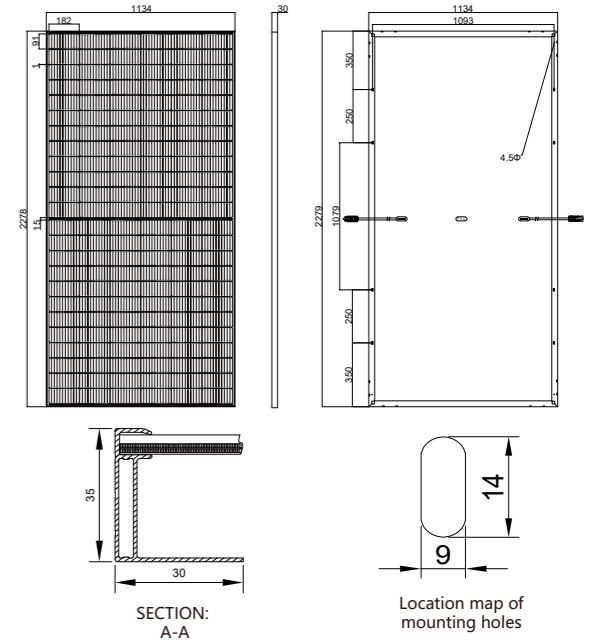
Size	2278x1134x30mm (LxWxH)
Weight	27.3kg
Front glass	3.2mm toughened glass
Cell	Monocrystalline PERC 182x91mm, 72*2pcs
Backplate	High weather resistance
Frame	Anodic alumina profile
Junction box	IP68, TUV, 3diodes
Cable	4mm ² , +400, -200/ ± 1400mm Wire length can be customized
Connector	MC4 compatible/original EVO2
Packaging mode	31pcs/pack;720pcs/40HQ

TEMPERATURE PARAMETERS

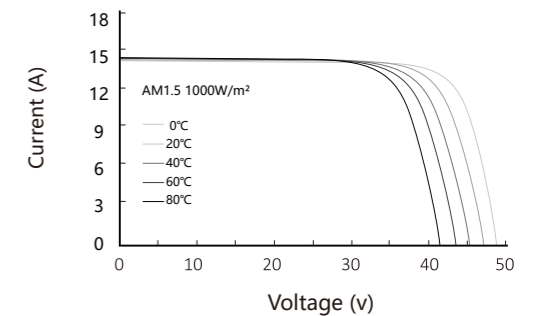
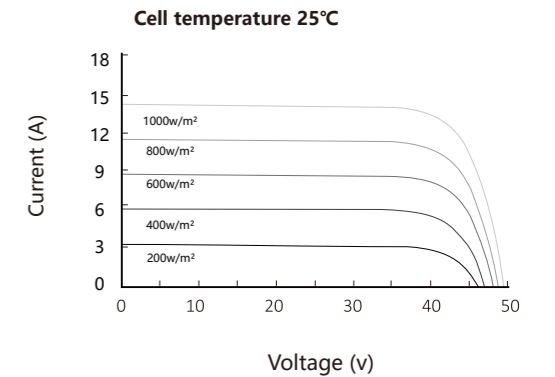
NMOT	42.30 °C (±2°C)
Open circuit voltage temperature coefficient	-0.27%/°C
Short circuit current temperature coefficient	+0.04%/°C
Maximum power temperature coefficient	-0.34%/°C

MAXIMUM RATED PARAMETERS

Maximum system voltage (V)	DC1500/1000 (IEC)
Maximum fuse rated current (A)	20
Maximum front static load (Pa)	5400
Working temperature (°C)	-40~+85
Hail resistance	Maximum diameter 25mm, impact speed 23m/s



I-V Curve



N-TYPE MONO-FACIAL PV MODULE

(410W-430W)



Features of Module

SMBB Technology
Better light trapping and current collection to improve PV module power output and reliability.

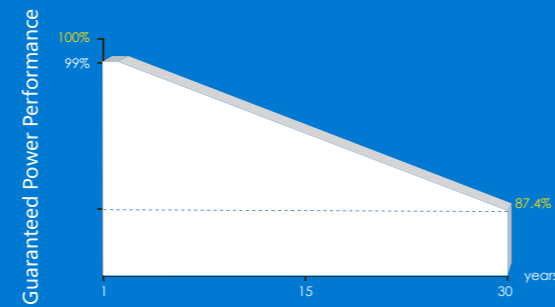
HOT 2.0
The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID.

PID Resistance
Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.

Enhanced Mechanical Load
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

Higher Power Output
Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.

Linear Power Performance Warranty

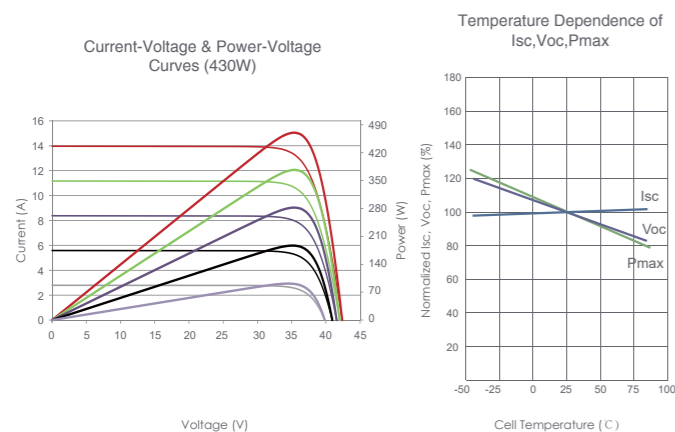


15 Year Product Warranty

30 Year Linear Output Power Warranty

0.40% Annual Degradation Over 30 years

Electrical Performance & Temperature Dependence



Product Data Sheet

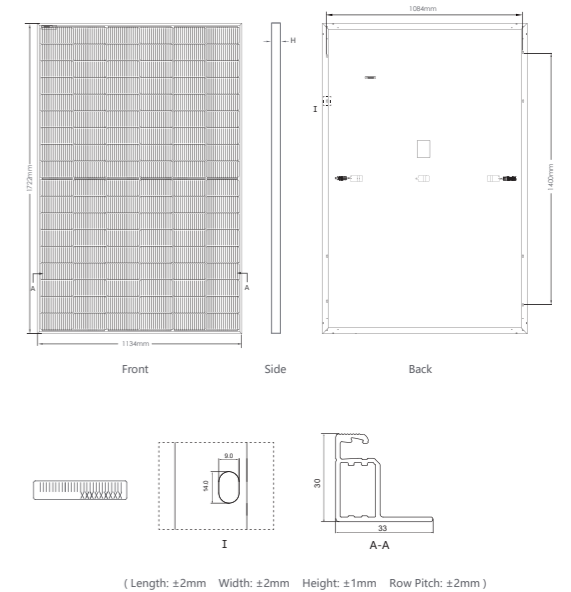
Packaging Configuration

(Two pallets = One stack)

36pcs/pallets, 72pcs/stack, 936pcs/ 40'HQ Container

Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	108 (6×18)
Dimensions	1722×1134×30mm (67.79×44.65×1.18 inch)
Weight	22 kg (48.50 lbs)
Front Glass	3.2mm, Anti-Reflection Coating High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm ² (+): 300mm, (-): 300mm or Customized Length



Specifications

Module Type	ANM-ND410W		ANM-ND415W		ANM-ND420W		ANM-ND425W		ANM-ND430W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	410Wp	308Wp	415Wp	312Wp	420Wp	316Wp	425Wp	320Wp	430Wp	323Wp
Maximum Power Voltage (Vmp)	31.13V	29.06V	31.32V	29.21V	31.51V	29.34V	31.70V	29.50V	31.88V	29.63V
Maximum Power Current (Imp)	13.17A	10.61A	13.25A	10.68A	13.33A	10.76A	13.41A	10.83A	13.49A	10.91A
Open-circuit Voltage (Voc)	37.73V	35.84V	37.92V	36.02V	38.11V	36.20V	38.30V	36.38V	38.49V	36.56V
Short-circuit Current (Isc)	13.91A	11.23A	13.99A	11.29A	14.07A	11.36A	14.15A	11.42A	14.23A	11.49A
Module Efficiency STC (%)	21.00%		21.25%		21.51%		21.76%		22.02%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1000/1500VDC (IEC)									
Maximum series fuse rating	25A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.29%/°C									
Temperature coefficients of Voc	-0.25%/°C									
Temperature coefficients of Isc	0.045%/°C									
Nominal operating cell temperature (NOCT)	45±2°C									

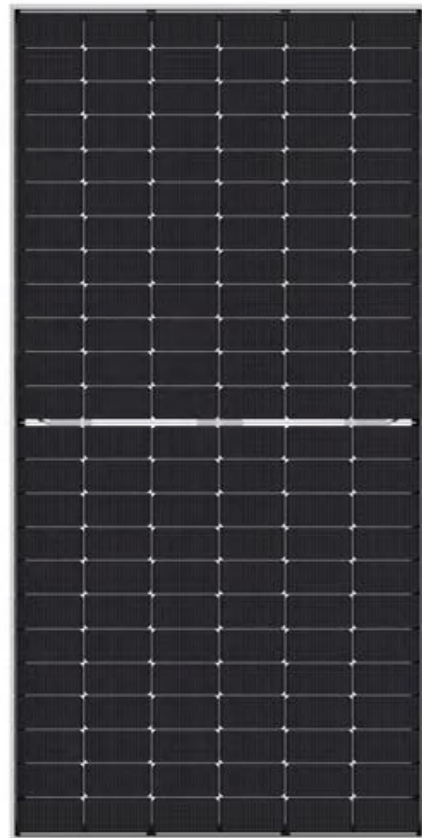
Quality Management System and Product Certification

IEC61215(2016), IEC61730(2016)
ISO9001:2015: Quality Management System
ISO14001:2015: Environment Management System
ISO45001:2018
Occupational health and safety management systems



N-TYPE BIFACIAL PV MODULE WITH DUAL GLASS

(560W-580W)



Features of Module



SMBB Technology
Better light trapping and current collection to improve PV module power output and reliability.



Hot 2.0 Technology
The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID.



PID Resistance
Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.

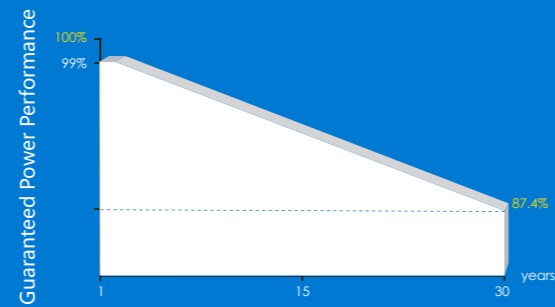


Enhanced Mechanical Load
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



Higher Power Output
Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.

Linear Performance Power Warranty



15 Year Product Warranty

30 Year Linear Output Power Warranty

0.40% Annual Degradation Over 30 years

Quality Management System and Product Certification

IEC61215(2016), IEC61730(2016)
ISO9001:2015: Quality Management System
ISO14001:2015: Environment Management System
ISO45001:2018
Occupational health and safety management systems



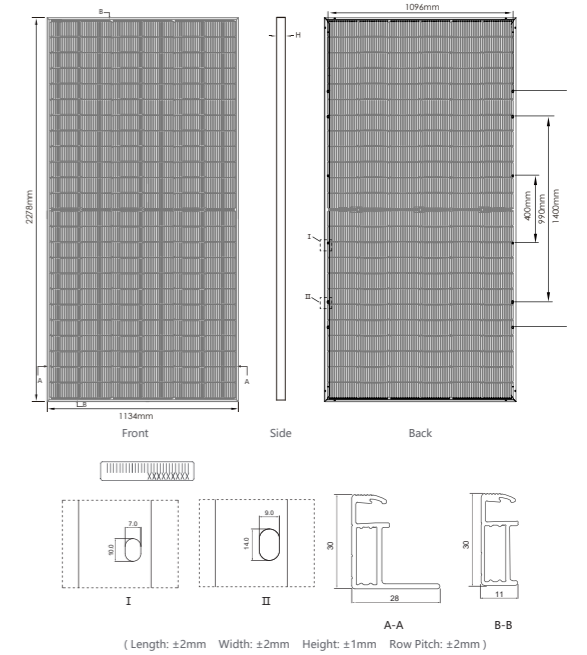
Product Data Sheet

Packaging Configuration

(Two pallets = One stack)
36pcs/pallets, 72pcs/stack, 720pcs/ 40'HQ Container

Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	144 (2×72)
Dimensions	2278×1134×30mm (89.69×44.65×1.18 inch)
Weight	32 kg (70.55 lbs)
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm ² (+): 300mm, (-): 300mm or Customized Length



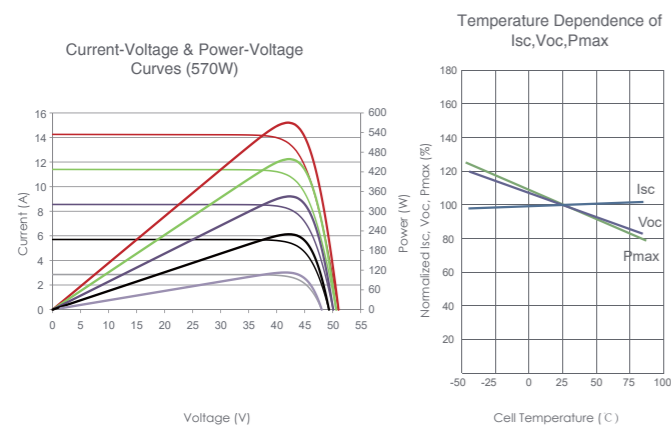
Specifications

Module Type	ANM-ND560W		ANM-ND565W		ANM-ND570W		ANM-ND575W		ANM-ND580W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	560Wp	421Wp	565Wp	425Wp	570Wp	429Wp	575Wp	432Wp	580Wp	436Wp
Maximum Power Voltage (Vmp)	41.95V	39.39V	42.14V	39.52V	42.29V	39.65V	42.44V	39.78V	42.59V	39.87V
Maximum Power Current (Imp)	13.35A	10.69A	13.41A	10.75A	13.48A	10.81A	13.55A	10.87A	13.62A	10.94A
Open-circuit Voltage (Voc)	50.67V	48.13V	50.87V	48.32V	51.07V	48.51V	51.27V	48.70V	51.47V	48.89V
Short-circuit Current (Isc)	14.13A	11.41A	14.19A	11.46A	14.25A	11.50A	14.31A	11.55A	14.37A	11.60A
Module Efficiency STC (%)	21.68%		21.87%		22.07%		22.26%		22.45%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	30A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.29%/°C									
Temperature coefficients of Voc	-0.25%/°C									
Temperature coefficients of Isc	0.045%/°C									
Nominal operating cell temperature (NOCT)	45±2°C									
Refer. Bifacial Factor	80±5%									

Bifacial Output-rearside Power Gain

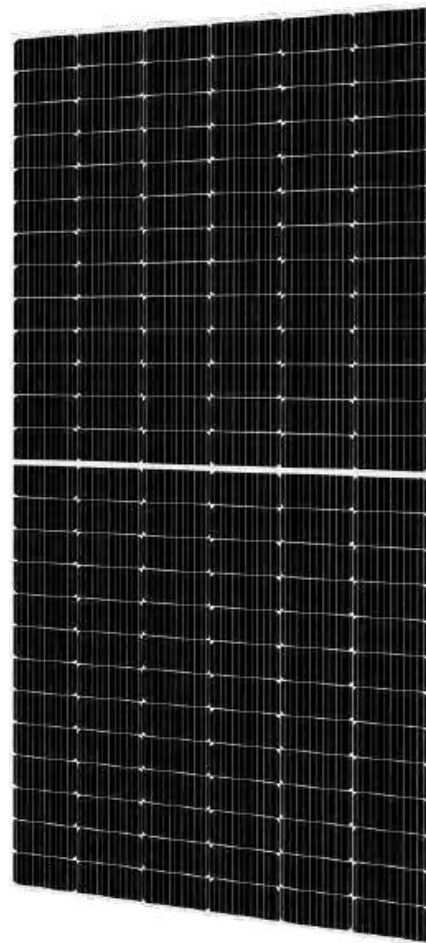
5%	Maximum Power (Pmax)	588Wp	593Wp	599Wp	604Wp	609Wp
	Module Efficiency STC (%)	22.76%	22.97%	23.17%	23.37%	23.57%
15%	Maximum Power (Pmax)	644Wp	650Wp	656Wp	661Wp	667Wp
	Module Efficiency STC (%)	24.93%	25.15%	25.37%	25.60%	25.82%
25%	Maximum Power (Pmax)	700Wp	706Wp	713Wp	719Wp	725Wp
	Module Efficiency STC (%)	27.10%	27.34%	27.58%	27.82%	28.07%

Electrical Performance & Temperature Dependence



HALF-CUT SINGLE/DOUBLE GLASS PV MODULE

(600W-630W)



Product Introduction

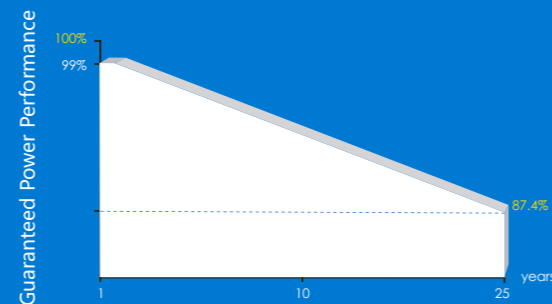
ANERN MONO half-cut single/double glass PV module, assembled with multi-busbar PERC technique and half-cut solar cells, which can not only absorb the energy from the front of the module, but also absorb the reflected light and the scattered light from the back, offer the advantages of higher power output, reduce shading effect on the energy generation, enhance the mechanical load bearing capacity as well.

LCOE save **6-8%**

Features of Module

- Multi Busbar Technology**
 Better light utilization and current collection, improve product power output and reliability.
- Hot-cut Technology**
 Through the half-cut technology, the current through each busbar is reduced to 1/2 than before. Therefore, the internal power loss of the half-cut module is reduced to 1/4 for the whole mould.
- PID Resistance**
 Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.
- Enhanced Mechanical Load**
 Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).
- Durability Against Extreme Environmental Conditions**
 High salt mist and ammonia resistance certificated by the third party.

Linear Performance Warranty



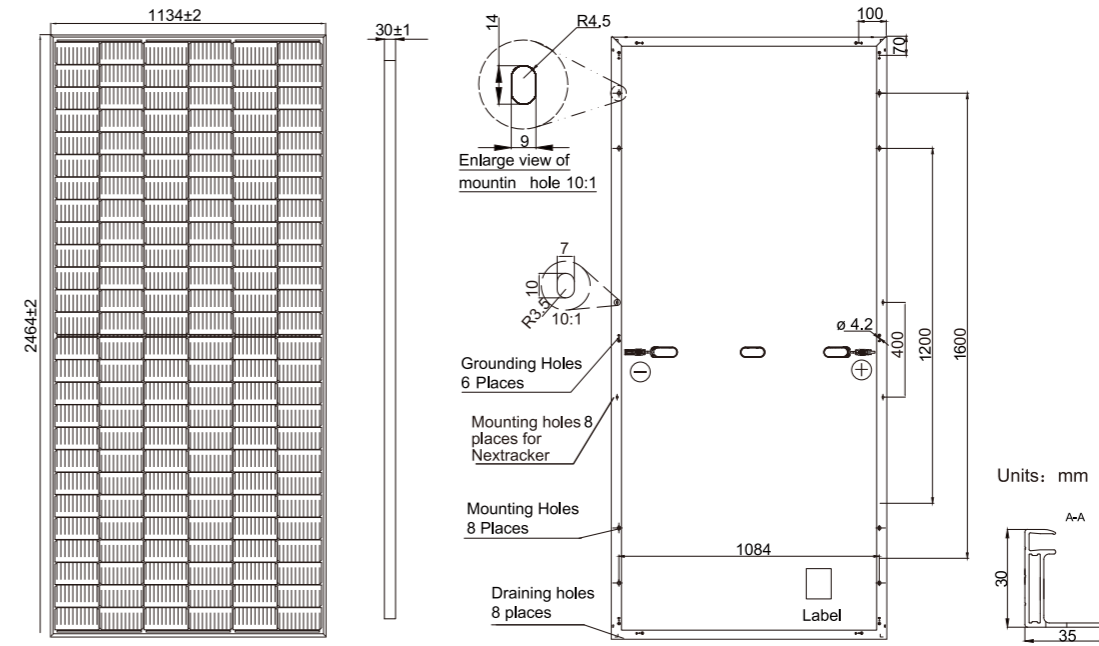
10 Year Product Warranty

25 Year Linear Output Power Warranty

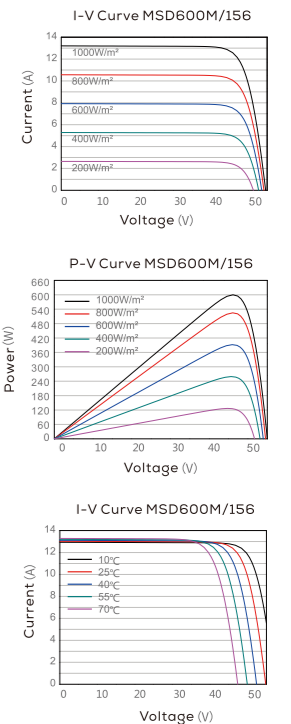
0.40% Annual Degradation Over 25 years

Quality Management System and Product Certification

IEC61215, IEC61730
 ISO9001:2015: Quality Management System
 ISO14001:2015: Environment Management System
 ISO45001:2018
 Occupational health and safety management systems



(PS: Frame colour and cable length can be customized)



Specifications

Cell Type	MONO(182mm)	Junction box	IP68, 3*bypass diode
No. of Cells	156pcs(6×26)	Cable	4.0mm²(+)-300mm/(-)300mm
Dimensions	2464×1134×30mm	Mechanical load	front 5400 Pa/back 2400 Pa
Weight	34.0kg/Pcs	Packing number	36 pcs/pallet
Structure	3.2mm. Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass+EVA Film+White Back	Packing volume	3.542 cbm/pallet
Frame	Anodized Aluminum Alloy	40' HQ container	648 pcs

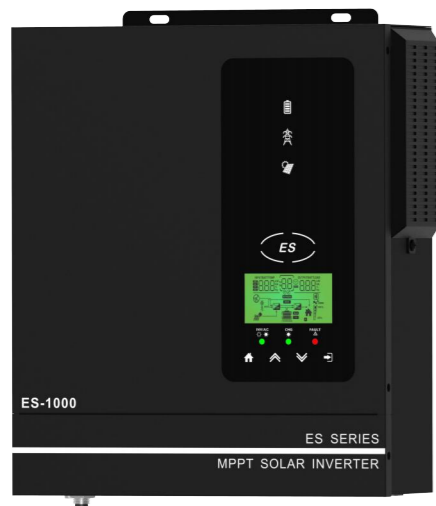
Electrical Parameters

Electrical Parameters at STC

Module Type	ANM-N600W	ANM-N610W	ANM-N620W	ANM-N630W
Rate Maximum Power(Pmax/W)	600	610	620	630
Module Efficiency(%)	21.50	21.80	22.20	22.5
Open Circuit Volatge(Voc/V)	54.67	54.85	55.21	55.90
Short Circuit Current(Isc/A)	13.60	13.82	14.03	14.32
Voltage at Pmax(Vmp/V)	46.64	46.80	47.19	46.57
Current at Pmax(Imp/A)	12.86	13.03	13.14	13.53
Power Tolerance	0~+5W			
Temperature Coefficient of Isc	+0.046%/°C			
Temperature Coefficient of Voc	-0.276%/°C			
Temperature Coefficient of Pmax	-0.350%/°C			
STC	Irradiance 1000W/m² Cell Temperature 25°C AM1.5			

Remark:Electrical data in this catalogue does not refer to a single module,and it's not part of the offer.It only serves for the comparison among different module types.

OFF GRID SOLAR INVERTER (AN-SCI-ES SERIES)



AN-SCI-ES-1000



AN-SCI-ES-1500

Features of Module

- Pure sine wave solar inverter
- Built in 40A MPPT solar charger
- PV input voltage range 20-150VDC (for 1000W),30-150VDC(for 1500W)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Meet various customized demands
- Solar energy is provided directly to the load first



Max.Efficiency
98%



40A MPPT



IP21
Ingress Protection

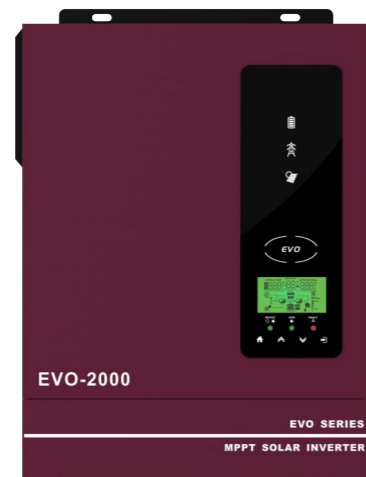
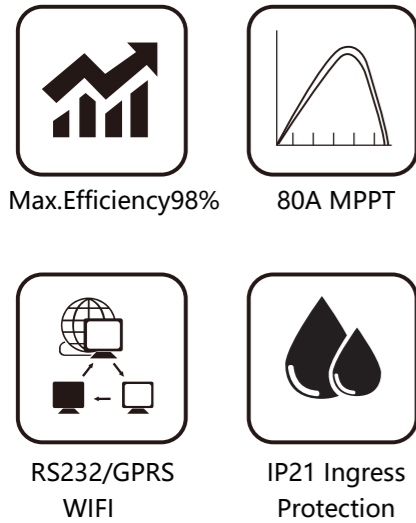


LCD Display

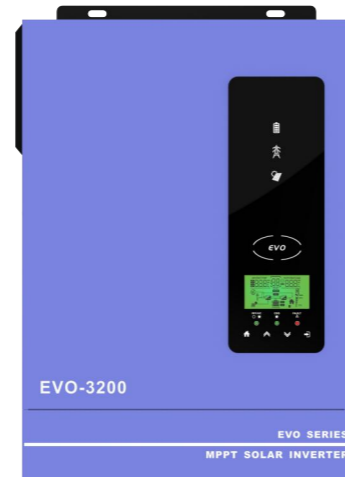


Model	AN-SCI-ES-1000	AN-SCI-ES-1500
RATED POWER	1000W	1500W
AC INPUT		
Voltage	230VAC	
Selectable Voltage Range	170-280VAC(For Personal Computers) 90-280VAC(For Home Appliances)	
Frequency Range	50 Hz/60Hz(Auto sensing)	
AC OUTPUT		
AC Voltage Regulation	230VAC±5%	
Surge Power	2000VA	3000VA
Efficiency(Peak)PV to INV	98%	
Efficiency(Peak)Battery to INV	94%	
Transfer Time	10 ms (For Personal Computers);20 ms (For Home Appliances)	
BATTERY & AC CHARGER		
Battery Voltage	12VDC	24VDC
Floating Charge Voltage	13.5VDC	27VDC
Overcharge Protection	16VDC	32VDC
Maximum AC Charge Current	40A	
SOLAR CHARGER		
Maximum PV Array Power	550W	1080W
MPPT Range @ Operating Voltage	20-150VDC	30-150VDC
Maximum PV Array Open Circuit Voltage	150VDC	150VDC
Maximum Solar Charging Current	40A	
Maximum (AC+Solar) Charging Current	80A	
PHYSICAL		
Dimension,D*W*H(mm)	286*240*91	
Cartoon Dimension,D*W*H(mm)	335*295*145	
Net Weight(kgs)	3	3.5
Gross Weight(kgs)	3.5	4

HYBRID SOLAR INVERTER (EVO SERIES)



AN-SCI-EVO-2000



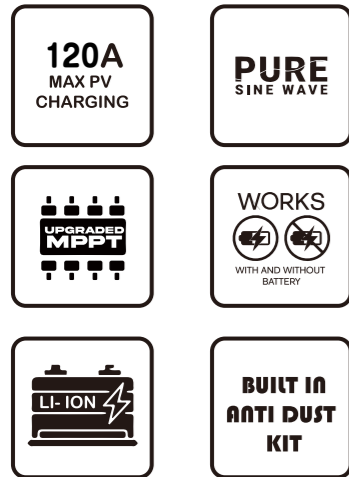
AN-SCI-EVO-3200

Features of Module

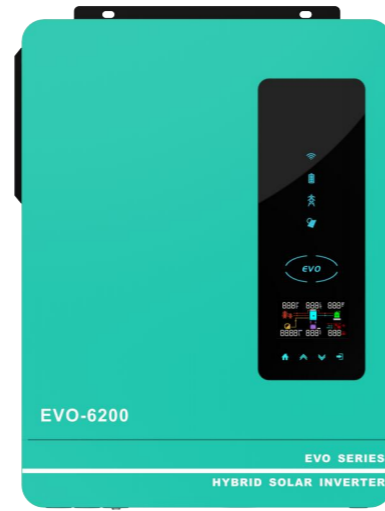
- Pure sine wave solar inverter
- Output power factor 1.0
- Built-in 80A MPPT solar controller
- Max 2000W & 3000W solar input power respectively
- High PV input voltage range (30-400VDC)
- Built-in anti-dusk kit for harsh environment
- Smart battery charge design to optimize battery life
- Compatible with lithium battery
- WIFI available for IOS and Android

Model	AN-SCI-EVO-2000	AN-SCI-EVO-3200
RATED POWER	2000VA/1600W	3200VA/3000W
AC INPUT		
Voltage	230VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) 90-280 VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
AC OUTPUT		
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	
Surge Power	4000VA	6400VA
Efficiency (Peak) PV to INV.	98%	
Efficiency (Peak) Battery to INV.	94%	
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)	
Waveform	Pure Sine Wave	
BATTERY & AC CHARGER		
Battery Voltage	12VDC	24VDC
Floating Charge Voltage	13.5VDC	27VDC
Overcharge Protection	16VDC	33VDC
Maximum AC Charge Current	60A	
SOLAR CHARGER		
Maximum PV Array Power	2000W	3000W
MPPT Range @ Operating Voltage	30-400VDC	
Maximum PV Array Open Circuit Voltage	400VDC	
Maximum Charging Current	80A	
PHYSICAL		
Dimension, D x W x H (mm)	360*270*100mm	390*270*100mm
Net Weight (kg)	4.4	5.4
INTERFACE		
Communication Interface	WIFI	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	-10°C - 50°C	
Storage Temperature	-15°C - 60°C	

HYBRID SOLAR INVERTER (EVO SERIES)



AN-SCI-EVO-4200



AN-SCI-EVO-6200

Features of Module

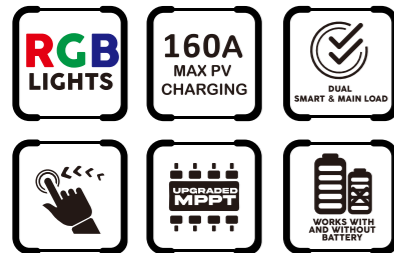
- Pure sine wave solar inverter
- Inverter running without battery
- One-key restoration to factory settings
- With function of Lithium battery automatic activation by PV
- Built-in 120A MPPT solar controller
- Max 6200W & 6500W solar input power respectively
- High PV input voltage range(60-450VDC)
- Built in anti-dusk kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output
- WIFI available for IOS and Android

Model	AN-SCI-EVO-4200	AN-SCI-EVO-6200
RATED POWER	4200W	6200W
Maximum PV Input Power	6200W	6500W
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC	
Maximum DC Voltage	60-450VDC	
Number of MPPT Trackers/Maximum Input Current	1/27A	
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195.5-253VAC	
Nominal Output Current	15.7A	27.0A
Power Factor	>0.99	
Feed-in Grid Frequency Range	49-51±1Hz/59-61±1Hz	
EFFICIENCY		
Maximum Conversion Efficiency(Solar to AC)	98%	
TWO-LOAD OUTPUT POWER		
Full Load	4200W	6200W
Maximum Main Load	4200W	6200W
Maximum Second Load(battery mode)	1400W	2067W
Main Load Cut-Off Voltage	22VDC	44VDC
Main Load Return Voltage	26VDC	52VDC
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	30A	40A
Nominal Operating Frequency	50/60Hz	
Surge Power	8400W	12400W
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure Sine Wave	
Efficiency(DC to AC)	94%	
BATTERY & CHARGER		
Nominal DC Voltage	24VDC	48VDC
Maximum Charging Current(Solar to AC)	120A	
Maximum AC Charging Current	100A	
GENERAL PHYSICAL		
Dimension, D x W x H (mm)	420*350*110mm	450*350*110mm
Net Weight (kgs)	9	10
INTERFACE		
Communication Interface	WIFI	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	-10°C - 50°C	
Storage Temperature	-15°C - 60°C	

HYBRID SOLAR INVERTER (EVO SERIES)

Features of Module

- Pure sine wave solar inverter
- Inverter running without battery.
- One-key restoration to factory settings.
- With function of Lithium battery automatic activation by PV.
- Built-in 160A MPPT solar controller (for 8.2KW,10.2KW), 140A(for 7.2KW)
- High PV input voltage range(90-450VDC).
- Built in anti-dusk kit for harsh environment.
- Smart battery charge design to optimize battery life.
- Dual output
- Touch button
- WIFI available for IOS and Android.



LCD Display



WIFI&GPRS Available for IOS and Android



RGB LIGHT

RGB lighting for different working modes

RGB automatically switches under different working modes of inverter:
 Battery mode: red;
 Utility mode: blue;
 PV mode: purple;



Model	AN-SCI-EVO-7200	AN-SCI-EVO-8200	AN-SCI-EVO-10200
RATED POWER	7200W	8200W	10200W
Maximum PV Input Power	7500W	8200W	10800W
GRID-TIE OPERATION			
PV INPUT (DC)			
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC		
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC		
Maximum DC Voltage	90-450VDC		
Number of MPPT Trackers/Maximum Input Current	1/27A		2/18A
GRID OUTPUT (AC)			
Nominal Output Voltage	220/230/240VAC		
Output Voltage Range	195.5-253VAC		
Nominal Output Current	31.3A	35.6A	44.3A
Power Factor	>0.99		
Feed-in Grid Frequency Range	49-51±1Hz/59-61±1Hz		
EFFICIENCY			
Maximum Conversion Efficiency(Solar to AC)	98%		
TWO-LOAD OUTPUT POWER			
Full Load	7200W	8200W	10200W
Maximum Main Load	7200W	8200W	10200W
Maximum Second Load(battery mode)	2400W	2733W	3400W
Main Load Cut-Off Voltage	44VDC	44VDC	44VDC
Main Load Return Voltage	48VDC	48VDC	48VDC
OFF-GRID OPERATION			
AC INPUT			
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC		
Acceptable Input Voltage Range	90-280VAC or 170-280VAC		
Maximum AC Input Current	40A	40A	50A
Nominal Operating Frequency	50/60Hz		
Surge Power	14400W	16400W	20400W
BATTERY MODE OUTPUT(AC)			
Nominal Output Voltage	220/230/240VAC		
Output Waveform	Pure Sine Wave		
Efficiency(DC to AC)	94%		
BATTERY & CHARGER			
Nominal DC Voltage	48VDC	48VDC	48VDC
Maximum Charging Current(Solar to AC)	140A	160A	160A
Maximum AC Charging Current	120A	140A	160A
GENERAL PHYSICAL			
Dimension, D x W x H (mm)	500*390*130mm	500*390*130mm	530*390*130mm
Net Weight (kgs)	14.2kg	14.2kg	14.5kg
INTERFACE			
Communication Interface	WIFI		
OPERATING ENVIRONMENT			
Humidity	5% to 95% Relative Humidity(Non-condensing)		
Operating Temperature	-10°C - 50°C		
Storage Temperature	-15°C - 60°C		

HYBRID SOLAR INVERTER (AN-SCI02 PLUS SERIES)



Features of Module

- Pure sine wave solar inverter
- Output power factor 1.0
- Wifi&GPRS available for IOS and android
- Inverter can run without battery
- Built-in 100A MPPT solar charger
- High PV input voltage range(120~500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life



Max.Efficiency98%



100A MPPT



RS232/GPRS WIFI

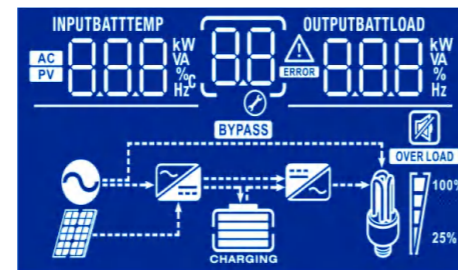


IP21 Ingress Protection

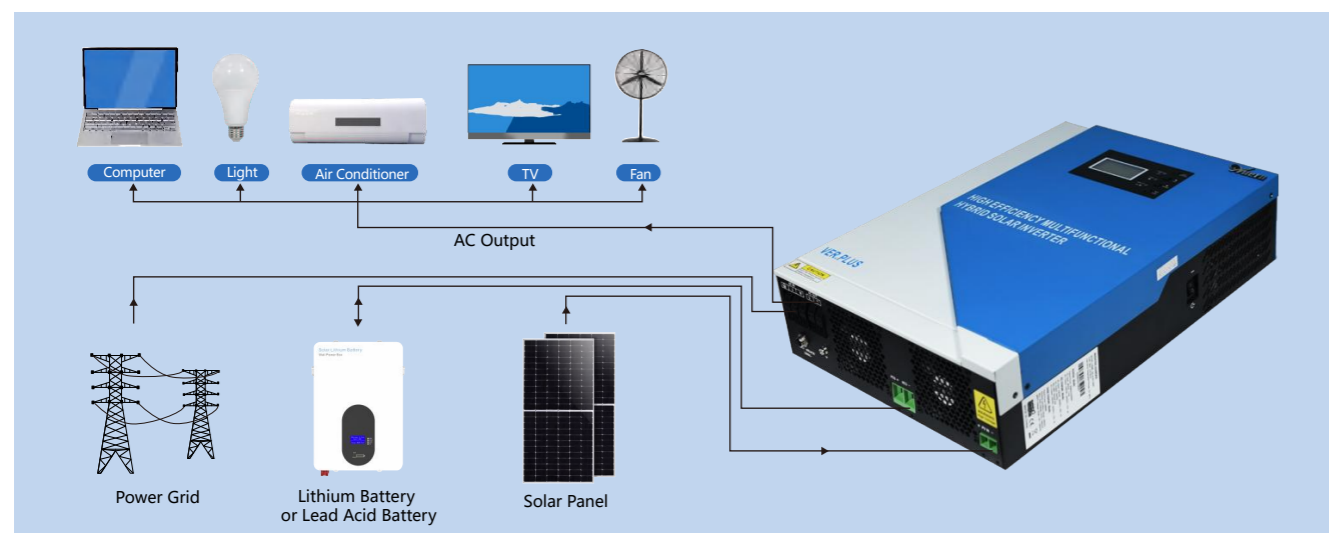
WIFI&GPRS Available for IOS and Android



LCD Display

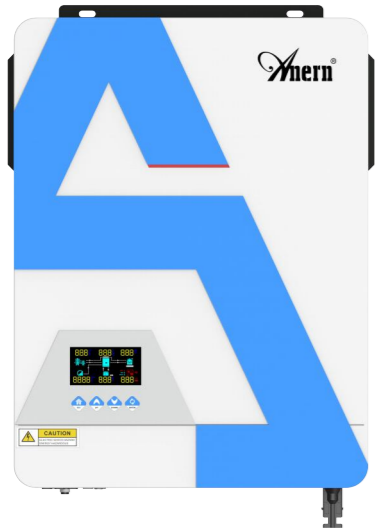


Product Topology



Model	AN-SCI02-PLUS-3500	AN-SCI02-PLUS-5500
Rated Power	3500VA/3500W	5500VA/5500W
INPUT		
Voltage	230VAC	
Selectable Voltage Range	170-280VAC(For Personal Computers) 90-280VAC(For Home Appliances)	
Frequency Range	50 Hz/60Hz(Auto sensing)	
OUTPUT		
AC Voltage Regulation(Batt.Mode)	230VAC±5%	
Surge Power	7000VA	11000VA
Efficiency(Peak)PV to INV	97%	
Efficiency(Peak)Battery to INV	94%	
Transfer Time	10 ms (For Personal Computers);20 ms (For Home Appliances)	
BATTERY & AC CHARGER		
Battery Voltage	24VDC	48VDC
Floating Charge Voltage	27VDC	54VDC
Overcharge Protection	33VDC	63VDC
Maximum Charge Current	80A	80A
SOLAR CHARGER		
Maximum PV Array Power	5000W	6000W
MPPT Range @ Operating Voltage	120-450VDC	
Maximum PV Array Open Circuit Voltage	500VDC	
Maximum Charging Current	100A	100A
Maximum Efficiency	98%	
PHYSICAL		
Dimension,D*W*H(mm)	100*300*440	
Cartoon Dimension,D*W*H(mm)	590*390*208	
Net Weight(kgs)	10	11
Gross Weight(kgs)	11	12
Communication interface	USB/RS232/GPRS/WIFI	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(Non~condensing)	
Operating Temperature	10°C~50°C	

HYBRID SOLAR INVERTER (AN-SCI02 PRO SERIES)



Features of Module

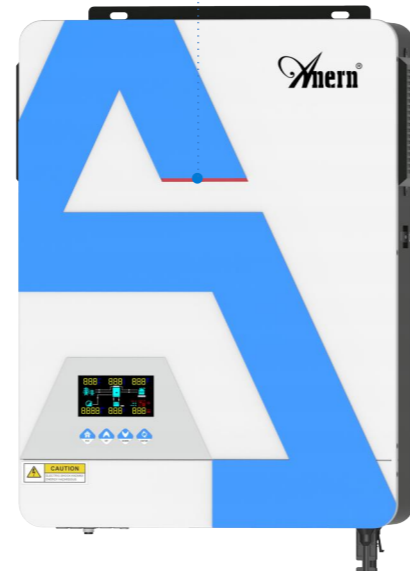
- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory settings
- Built-in lithium battery automatic activation
- Built-in 120A(for 3.6KW/6.2KW)/140A(for 4.2KW)
- MPPT: Max 6200w(for 3.6kw/4.2kw),max 6500w (for 6.2kw) solar charge
- High PV input voltage range(90-500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life



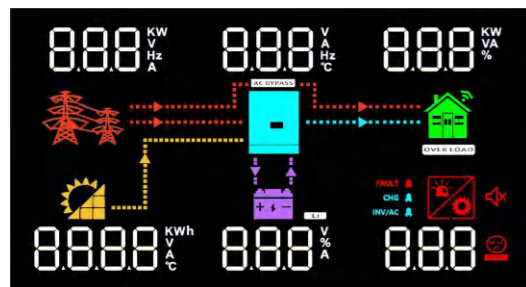
RGB LIGHT

RGB lighting for different working modes

RGB automatically switches under different working modes
 Battery mode: red;
 Utility mode: blue;
 PV mode: purple;



LCD Display



WIFI&GPRS Available for IOS and Android



Model	AN-SCI02-Pro-3600	AN-SCI02-Pro-4200	AN-SCI02-Pro-6200
Phase	1-phase		
Maximum PV Input Power	6200W	6200W	6500W
Rated Output Power	3600W	4200W	6200W
Maximum Solar Charging Current	120A	140A	120A
GRID-TIE OPERATION			
PV Input(DC)			
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC		
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC		
MPPT Voltage Range	90-450VDC		
Number of MPPT Trackers/Maximum Input Current	1/27A		
GRID OUTPUT(AC)			
Nominal Output Voltage	200/230/240VAC		
Output Voltage Range	195.5~253VAC		
Nominal Output Current	15.7A	18.2A	27.0A
Power Factor	>0.99		
Feed-in Grid Frequency Range	49-51±1Hz		
EFFICIENCY			
Maximum Conversion Efficiency(Solar to AC)	98%		
OFF-GRID OPERATION			
AC INPUT			
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC		
Acceptable Input Voltage Range	90-280VAC or 170-280VAC		
Maximum AC Input Current	30A	30A	40A
Nominal operating frequency	50/60Hz		
Surge power	7200W	8400W	12400W
BATTERY MODE OUTPUT(AC)			
Nominal Output Voltage	24VDC	24VDC	48VDC
Output Waveform	Pure sine wave		
Efficiency(DC to AC)	94%		
BATTERY & CHARGER			
Nominal DC Voltage	24VDC	24VDC	48VDC
Maximum Charging Current (Solar to AC)	120A	140A	120A
Maximum AC Charging Current	100A		
GENERAL PHYSICAL			
Dimension,D*W*H(mm)	420*310*110		
Cartoon Dimension,D*W *H(mm)	590*390*208		
Net Weight(kgs)	8.8	9.3	9.8
Gross Weight(kgs)	10	11	11
INTERFACE			
Communication Port	RS232/WIFI/GPRS		
ENVIRONMENT			
Operating Temperature	-10-50°C		

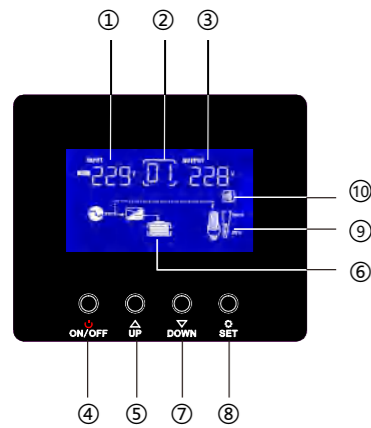
LOW FREQUENCY INVERTER (AN-WSPI SERIES)



Features of Module

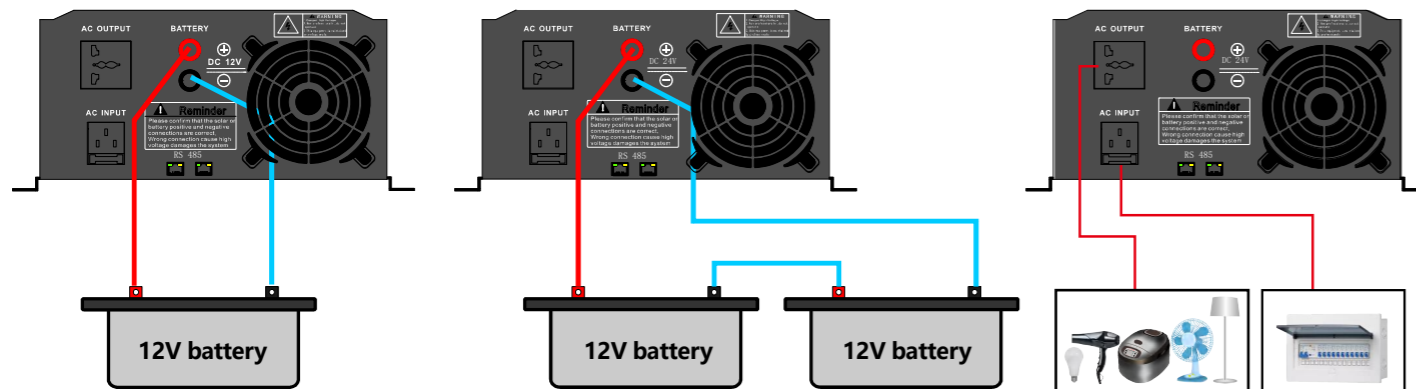
- Pure sine wave output
- With UPS automatic switching function, grid power charging function
- It has perfect protection functions such as overload high voltage, low voltage, short circuit, etc.
- DSP Intelligent Chip Control, Excellent Performance
- Strong inverting capability, one-time soft start, triple output peak power, with all inductive loads
- Smart LCD display and setting(Working modes, Charge Current, Charge Voltage, charging on/of switch, AC range input, battery voltage, battery low voltage shutdown etc.)
- Full personalized LCD display, inverters can display various data information
- Mains priority mode, Battery priority mode, energy saving priority generator mode, mains priority unattended mode, Battery priority unattended mode, can be set freely to meet different occasions
- WIFI/RS485 remote monitoring communication (Optional)

LCD Display Information



NO	LCD Display	Contents Descriptions
①	INPUTAC	Input
②	(01)	Working mode code
③	OUTPUT	AC Output
④	⏻	ON/OFF button
⑤	⬆	UP button
⑥	BATT	battery capacity
⑦	⬇	DOWN button
⑧	⊛	SET button
⑨	LOAD 25%--100%	Load output percentage
⑩	🔇	Mute

Solar System Connection



Model	AN-WSPI-500W	AN-WSPI-700W	AN-WSPI-1000W	AN-WSPI-1200W	AN-WSPI-1500W
Inverter Output					
Rated power	500W	700W	1000W	1200W	1500W
Surge rating(20MS)	1500W	2100W	3000W	3600W	4500W
Capable of starting electric Motor	150W	200W	300W	400W	500W
Wave form	Pure sine wave				
Power factor	1				
Output voltage RMS	110VAC/120VAC ;220VAC/230VAC/240VAC±10 %				
Output frequency	50Hz or 60Hz (±0.3Hz)				
Inverter efficiency (peak)	>85%				
Line mode efficiency	>95%				
Overload	120%<Load<130% ±10:Fault(Turnoff output after 60seconds)				
	130%<Load<150% ±10:Fault(Turnoff output after 10seconds)				
	150%<load±10:Fault(Turnoff output after 10seconds)				

Battery

Battery voltage	12VDC/24VDC	24VDC
Minimum start voltage	(9.5V-12.5V adjustable)+0.5V for 12VDC mode (*2 for 24VDC)	
Low battery voltage cut of	(9.5V-12.5V adjustable), 10V(default) for 12VDC mode (*2 for 24VDC)	
Low battery voltage alarm	(9.5V-12.5V adjustable)+0.5V,10.5V(default) for 12VDC mode (*2 for 24VDC)	
High battery voltage alarm	16V for 12VDC mode (*2 for 24VDC)	
High Battery Voltage Recover	15.5V for 12VDC mode (*2 for 24VDC)	
Battery type	AGM,Lead Acid,Lithium, Ternary	

AC Input Mode

Input wave form	Pure sine wave				
AC input voltage	110V/120VAC±20% ;220/230/240VAC±20%				
Low input voltage	110/120VAC:70-90VAC(adjustable),80VAC(default) ; 220/240VAC:140-180VAC(adjustable),140VAC(default)				
Max input voltage	110/120VAC:130-145VAC(adjustable),137VAC(default) ; 220/240VAC:260-290VAC(adjustable),275VAC(default)				
Input frequency	50Hz/60Hz (auto sensing)				
Efficiency (AC mode)	>95% (load, full battery)				
Transfer time AC to DC	8ms(Max)				

AC Charge Current (Max)

12V	10A	20A	30A	30A	/
24V	5A	10A	20A	20A	30A
Min charge current 5A, Change by every 5A					

Dimensions

Mounting	Wall Mount				
Dimensions (W*H*D)	470*390*210mm				
Ship Dimensions (W*H*D)	580*380*270mm(2pcs / Carton)				
Net Weight (Solar CHG)(kg)	7.5	8.5	10.5	11	12
Shipping Weight (Solar CHG)(kg)	15	17	21	22	24
Overload Warranty	1 year				

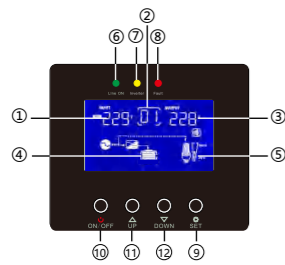
LOW FREQUENCY INVERTER (AN-SPI SERIES)



Features of Module

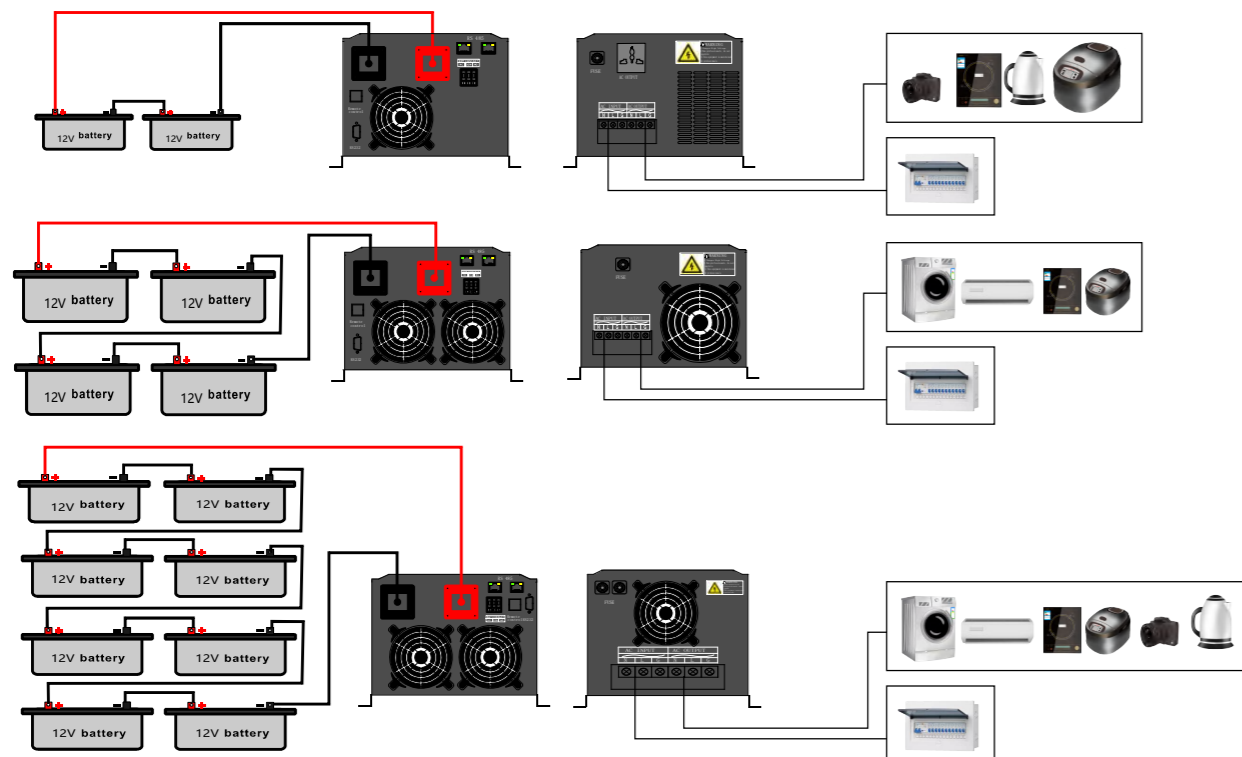
- Pure sine wave output
- With UPS automatic switching function, grid power charging function
- It has perfect protection functions such as overload high voltage, low voltage, short circuit, etc.
- DSP Intelligent Chip Control, Excellent Performance
- Strong inverting capability, one-time soft start, triple output peak power, with all inductive loads
- Smart LCD display and setting(Working modes, Charge Current, Charge Voltage, charging on/of switch, AC range input, battery voltage, battery low voltage shutdown etc.)
- Full personalized LCD display, inverters can display various data information
- Mains priority mode, Battery priority mode, Energy saving priority Generator mode, mains priority unattended mode, Battery priority unattended mode, can be set freely to meet different occasions
- WIFI/RS485 remote monitoring communication (Optional)

LCD Display Information



NO	LCD Display	Contents Descriptions
①	Inputac	AC Input
②	(01)	Working mode code
③	Output	AC Output
④	Battery	Battery capacity
⑤	LOAD 25%~100%	Load output percentage
⑥	Line ON	AC indicator
⑦	Inverter	Inverter indicator
⑧	Fault	Fault indicator
⑨	⊕	SET button
⑩	⊖	ON/OFF button
⑪	⬆	UP button
⑫	⬇	DOWN button

Solar System Connection



Model	2000W	3000W	4000W	5000W	6000W	8000W	10000W	12000W
Inverter Output								
Rated power	2000W	3000W	4000W	5000W	6000W	8000W	10000W	12000W
Surge rating(20MS)	6000W	9000W	12000W	15000W	18000W	24000W	30000W	36000W
Capable of starting electric Motor	1P	1.5P	2P	3P	3.5P	4P	5P	6P
Wave form	Pure sine wave							
Power factor	1							
Output voltage RMS	110VAC/120VAC;220VAC/230VAC/240VAC				220VAC/230VAC/240VAC			
Output frequency	50Hz or 60Hz (±0.3Hz)							
Inverter efficiency (peak)	>85%							
Line mode efficiency	>95%							
Overload	120%<Load<130% ±10:Fault(Turnoff output after 60seconds) 130%<Load<150% ±10:Fault(Turnoff output after 10seconds) 150%<Load±10:Fault(Turnoff output after 10seconds)							

Battery

Battery voltage	24VDC/48VDC	48VDC/96VDC
Minimum start voltage	(9.5V-12.5V adjustable)+0.5V for 12VDC mode (*2 for 24VDC, *4 for 48VDC, *8 for 96VDC)	
Low battery voltage cut of	(9.5V-12.5V adjustable), 10V(default) for 12VDC mode (*2 for 24VDC, *4 for 48VDC, *8 for 96VDC)	
Low battery voltage alarm	(9.5V-12.5V adjustable)+0.5V,10.5V(default) for 12VDC mode (*2 for 24VDC,*4 for 48VDC, *8 for 96VDC)	
High battery voltage alarm	16V for 12VDC mode (*2 for 24VDC, *4 for 48VDC,*8 for 96VDC)	
High Battery Voltage Recover	15.5V for 12VDC mode (*2 for 24VDC,*4 for 48VDC, *8 for 96VDC)	
Battery type	AGM,Lead Acid,Lithium, Ternary	

AC Input Mode

Input wave form	Pure sine wave
AC input voltage	110V/120VAC±25%;220/230/240VAC±25%
Low input voltage	110/120VAC:70-90VAC(adjustable),80VAC(default) ; 220/240VAC:140-180VAC(adjustable),160VAC(default)
Max input voltage	110/120VAC:130-145VAC(adjustable),137VAC(default) ; 220/240VAC:260-290VAC(adjustable),275VAC(default)
Input frequency	50Hz/60Hz (auto sensing)
Efficiency (AC mode)	>95% (load, full battery)
Transfer time AC to DC	8ms(Max)

AC Charge Current (Max)

24V	40A	40A	50A	/	/	/	/	/
20A	20A	30A	40A	50A	50A	50A	50A	50A
96V	/	/	/	20A	20A	30A	30A	30A
Min charge current 5A, Change by every 5A								

Dimensions

Mounting	Wall Mount							
Dimensions (W*H*D)	480*280*200mm		640*280*200mm		760*320*240mm			
Ship Dimensions (W*H*D)	565*350*255mm		750*370*270mm		840*405*320mm			
Net Weight (Solar CHG)(kg)	19	21	29	31	33	53	55	60
Shipping Weight (Solar CHG)(kg)	21	23	31	33	35	58	60	65
Warranty	1 year							

MPPT SOLAR CONTROLLER (AN-MPJ SERIES)



Features of Module

The solar charge controller is a multi-level maximum power point tracking (MPPT) photovoltaic battery charge controller with its own technology. Compared with the PWM controller, the MPPT can improve the control accuracy and the output power of the solar panel can be increased by 5%-30%.

Specification Characteristics



Rated Charge Current	10A-60A
Rated Voltage	12V/24V
System Voltage	100V



Protections



Parameters Adjustable



Battery Type



Rs485/RJ45 Port (Optional)



Temperature Compensation



Class V-0 Flame Retardant Enclosure

Model	AN-MPJ20	AN-MPJ40	AN-MPJ60
Input			
Maximum PV open circuit voltage	100V (at the lowest temperature) 92V (at a standard temperature of 25°C)		
Minimum PV voltage	20V/40V/60V/80V		
Rated Charge Current	20A	40A	60A
Output			
System voltage	12V/24V Auto		
Rated Discharge Current	10A	20A	30A
Own consumption	<50mA		
MPPT highest accuracy	99%		
Maximum charging efficiency	97%		
Charging control mode	Multi-stage(MPPT, Absorption, Float,Equalization,CV)		
Float charge	13.8V/27.6V		
Absorption charge	14.4V/28.8V		
Equalization charge	14.6V/29.2V		
Load disconnection(LVD)	10.8V/21.6V		
Load reconnection(LVR)	12.6V/25.2V		
Load control mode	Normal, light control, light and timing control, timing control, reverse light control		
Light control point voltage	5V/10V/15V/20V		
Battery Type	GEL, SLD,FLD and USR(default),Lithium batteries customization 3series 3.7V, 4 series 3.7V, 4series 3.2V, 5series 3.2V		

Other

Human interface	LCD with backlight, 2 buttons		
Cooling mode	AL alloy heat sink		
Wiring	High current copper terminals16 mm ² (3AWG)		
Temperature probe	built-in		
Communication mode	RS485,RJ45 port		
Working temperature range	-20~+55°C		
Storage temperature range	-30~+80°C		
Humidity	10%~90% No condensation		

Dimensions

Product size	175 x 145 x 47mm	215 x 145 x 75mm	260 x 190 x 85mm
Mounting hole spacing	108*120mm-Φ5	130*130mm-Φ5	180*214mm-Φ5
N.W	0.6Kg	1.3Kg	2.3Kg
G.W	0.65Kg	1.5Kg	2.5Kg

Note: Please operate at the ambient temperature allowed by the controller. If the ambient temperature exceeds the allowable range of the controller, please derate it

MPPT SOLAR CONTROLLER (AN-MPK2 SERIES)



Features of Module

The solar charge controller is a multi-level maximum power point tracking (MPPT) photovoltaic battery charge controller with its own technology. Compared with the PWM controller, the MPPT can improve the control accuracy and the output power of the solar panel can be increased by 5%-30%.

Specification Characteristics



Rated Charge Current	30A-100A
Rated Voltage	12V/24V/36V/48V
System Voltage	150V



Protections



Parameters Adjustable



Battery Type



Rs485/RJ45 Port (Optional)



Class V-0 Flame Retardant Enclosure



Model	AN-MPK2-40	AN-MPK2-60	AN-MPK2-80	AN-MPK2-100		
Input						
Maximum PV open circuit voltage	150V (at the lowest temperature) 138V (at a standard temperature of 25°C)					
Minimum PV voltage	20V/40V/60V/80V					
Rated Charge Current	30A	40A	50A	60A	80A	100A
Output						
System voltage	12V/24V/36V/48V/ Auto					
Rated Discharge Current	15A	20A	25A	30A	40A	50A
Own consumption	<35mA(48V)					
MPPT highest accuracy	99%					
Maximum charging efficiency	97%					
Charging control mode	Multi-stage(MPPT, Absorption, Float,Equalization,CV)					
Float charge	13.8V/27.6V/41.4V/55.2V					
Absorption charge	14.4V/28.8V/43.2V/57.6V					
Equalization charge	14.6V/29.2V/43.8V/58.4V					
Load disconnection(LVD)	10.8V/21.6V/32.4V/43.2V					
Load reconnection(LVR)	12.6V/25.2V/37.8V/50.4V					
Load control mode	Normal, light control, light and timing control, timing control, reverse light control					
Light control point voltage	5V/10V/15V/20V					
Battery Type	GEL, SLD,FLD and USR(default),Lithium batteries customization 3series 3.7V, 4 series 3.7V, 4series 3.2V, 5series 3.2V					

Other

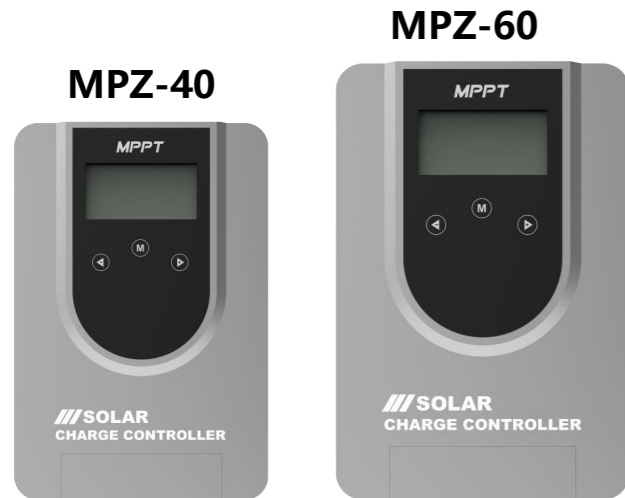
Human interface	Color LCD with backlight, 3 buttons			
Cooling mode	AL alloy heat sink and cooling fan			
Wiring	High current copper terminal≤25 mm ² (3AWG)			
Temperature probe	line length 3 meters			
Communication mode	RS485,RJ45 port			
Working temperature range	-20~+55°C			
Storage temperature range	-30~+80°C			
Humidity	10%~90% No condensation			

Dimensions

	250 x 190 x 95mm	280 x 210 x 100mm	350 x 230 x 112mm	/
Product size	250 x 190 x 95mm	280 x 210 x 100mm	350 x 230 x 112mm	/
Mounting hole spacing	120mm-Φ5	140mm-Φ5	170mm-Φ5	/
N.W	2.3Kg	3.5Kg	4.6Kg	/
G.W	2.6Kg	4Kg	5.2Kg	/

Note: Please operate at the ambient temperature allowed by the controller. If the ambient temperature exceeds the allowable range of the controller, please derate it

MPPT SOLAR CONTROLLER (AN-MPZ SERIES)



Features of Module

The solar charge controller is a multi-level maximum power point tracking (MPPT) photovoltaic battery charge controller with its own technology. Compared with the PWM controller, the MPPT can improve the control accuracy and the output power of the solar panel can be increased by 5%-30%.

Rated Charge Current	30A-100A
Rated Voltage	12V/24V/36V/48V
System Voltage	150V

Function Introduction



Model	AN-MPZ40		AN-MPZ60	
Input				
Maximum PV open circuit voltage	150V (at the lowest temperature), 138V (at a standard temperature of 25°C)			
Minimum PV voltage	20V/40V/60V/80V			
Rated Charge Current	30A	40A	50A	60A
Output				
System voltage	12V/24V/36V/48V/ Auto			
Rated Discharge Current	15A	20A	25A	30A
Own consumption	<35mA(48V)			
MPPT highest accuracy	99%			
Maximum charging efficiency	97%			
Charging control mode	Multi-stage(MPPT, Absorption, Float,Equalization,CV)			
Float charge	13.8V/27.6V/41.4V/55.2V			
Absorption charge	14.4V/28.8V/43.2V/57.6V			
Equalization charge	14.6V/29.2V/43.8V/58.4V			
Load disconnection(LVD)	10.8V/21.6V/32.4V/43.2V			
Load reconnection(LVR)	12.6V/25.2V/37.8V/50.4V			
Load control mode	Normal, light control, light and timing control, timing control, reverse light control			
Light control point voltage	5V/10V/15V/20V			
Battery Type	GEL, SLD,FLD and USR(default),Lithium batteries customization 3series 3.7V, 4 series 3.7V, 4series 3.2V, 5series 3.2V			
Other				
Human interface	Color LCD with backlight, touch button			
Cooling mode	Cast aluminum casing			
Wiring	High current copper terminal≤25 mm ² (3AWG)			
Temperature probe	line length 3 meters			
Communication mode	RS485,RJ45 port			
Working temperature range	-20~+55°C			
Storage temperature range	-30~+80°C			
Humidity	10%~90% No condensation			
Dimensions				
Product size	168 x 248 x 94mm		188 x 280 x 94mm	
Mounting hole spacing	138 x 180mm-Φ5		154 x 206mm-Φ5	

Note: Please operate at the ambient temperature allowed by the controller. If the ambient temperature exceeds the allowable range of the controller, please derate it



PORTABLE SOLAR GENERATOR (AN-MPSG-N)

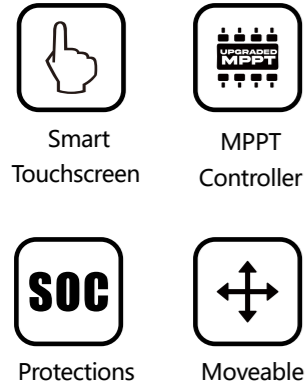


Key Features

- Dual CPU intelligent control with excellent performance technology
- Built-in LiFePo4 lithium battery
- The mains supply mode/energy-saving mode/battery mode can be set flexibly
- Convenient and practical 5VDC-USB output port and 12VDC output port
- MPPT controller greatly improving the charging efficiency to more than 20%
- Overcharge and overdischarge protections to get a longer battery life
- Safe and reliable intelligent exhaust fan control
- Overall automatic protection and alarms including AC output overload protection, short circuit protection, etc

Model	AN-MPSG-N500	AN-MPSG-N1000	AN-MPSG-N2000	AN-MPSG-N3000	AN-MPSG-N5000
Battery Voltage	12.8V	12.8V	25.6V	25.6V	48V
Inverter					
Rated Power	500W	1000W	2000W	3000W	5000W
Input Voltage Range	110/220VAC±10%				
Input Frequency	45-65Hz				
Output Voltage	110/120/220/240VAC(optional)				
Output Frequency	50/60Hz				
Output Wave	Pure Sine Wave				
Specification Of Built-in Lithium Battery	600WH	1200WH	2500WH	3000WH	5000WH
Communication	RS485/WIFI(optional)				
Solar Input					
Max. PV Power	240W	480W	800W	1500W	3000W
Range Of Charging Voltage	15-90VDC	30-90VDC	30-90VDC	30-130VDC	60-160VDC
Rated Charge Current	20A		30A	60A	
DC Output					
5VDC USB Output	2 units / MAX2A				
12VDC Output Ports	2 units / MAX2A				
Physical					
Transfer Time	Typical: 5-8ms(Including detection time)				
Heat Dissipation/Cooling	Temperature control by intelligent exhaust fan				
Display	Digital LCD				
Electricity Charging	Yes				
Operating Temperature	-10°C-+50°C				
Operating Humidity	10%-90%				
Short Circuit Protection	Software Protection				
External Size	410*210*300mm	410*210*385mm	460*275*495mm	460*275*495mm	550*300*600mm
Package Size	458*258*348mm	458*258*433mm	495*290*640mm	495*290*640mm	585*315*760mm
G.W.(Gross Weight)	18kg	27kg	50kg	59kg	90kg

LITHIUM BATTERY SOLAR SYSTEM (AN-MPSG-T)



Key Features

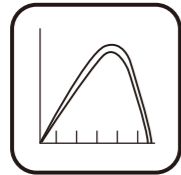
- Dual CPU intelligent control with excellent performance technology
- The mains supply mode/energy-saving mode/battery mode can be set flexibly
- Convenient and practical 5VDC-USB output port and 12VDC output port
- MPPT controller greatly improving the charging efficiency to more than 20%
- Overcharge and overdischarge protections to get a longer battery life
- Safe and reliable intelligent exhaust fan control
- Convenient Touch screen to view system data
- Overall automatic protection and alarms including AC output overload protection, short circuit protection, etc

Model	AN-MPSG-T-S3000	AN-MPSG-T-S5000	AN-MPSG-T-D5000
Rated Power	3000W	5000W	5000W
Surge Power	6000W	10000W	10000W
Commercial Power Range	110/120/220/230/240VAC(Optional)		
AC Frequency Range	45-65Hz		
AVR Voltage Range	110/120/220/230/240VAC±10%(Auto-sensing)		
Output Frequency Range(AC mode)	Tracking automatically / shared frequency with the commercial inversion state: 50/60±0.5Hz		
Output Wave Form	Pure Sine Wave		
Output Overload	105%<Load<110%±10%: Fault(Turn off output after 60 seconds) 110%<Load<130%±10%: Fault(Turn off output after 10 seconds) 150%<Load±10%: Fault(Turn off output after 1 seconds)		
Max Solar Charger Current	60A	30A	60A
PV Voltage Input Range	34-150VDC(MPPT)	65-150VDC(MPPT)	65-150VDC(MPPT)
Max PV Power Input	1500W	1500W	3000W
Battery Type	Li-ion lithium battery		
Battery DC Voltage	22.2VDC	44.4VDC	44.4VDC
Battery Capacity	2700WH	4500WH	9000WH
DC Output	TYPE C-PD60 USB QC3.0 USB-5VDC 2.4A/2 units		
Transfer Time	Typical: 5-8ms(Including detection time)		
Thermal Method	Cooling Fan		
Communication Port	RS485/WIFI(Optional)		
Operating Temperature	-20°C-+50°C		
Operating Humidity	10%-90%		
Short Circuit Protection	Software Protection		
External Size	536*480*505mm	536*480*505mm	536*480*735mm

PORTABLE SOLAR STORAGE SYSTEM (AN-MPSG-E)



Max. Efficiency 98%



120A MPPT



RS485



IP21 Ingress Protection

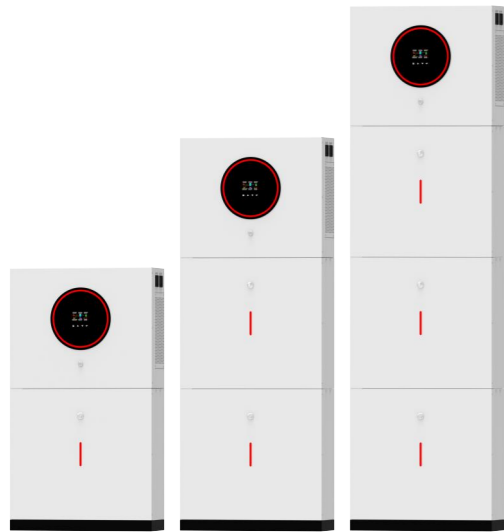


Features of Module

- Pure Sine Wave Solar Hybrid Inverter
- Built-in MPPT solar controller, max charge current 120A
- Built-in New LiFePo4 lithium battery
- Wide PV charging voltage range (20-150VDC/60-450VDC)
- With function of Lithium battery automatic activation by PV(3600&6200)
- Smart battery charge design to maximize battery lifespan
- RGB indicator light
- Dual AC output(E3600&6200)

Model	MPSG-E1000	MPSG-E3600	MPSG-E6200
Battery Voltage	12.8V	25.6V	48V
Inverter			
Rated Power	1000W	3600W	6200W
Input Voltage Range	220/230/240VAC		
Input Frequency	50/60Hz		
Output Voltage	195.5-253VAC		
Output Frequency	49-51±1Hz / 59-61±1Hz		
Output Wave	Pure Sine Wave		
Specification Of Built-in Lithium Battery	1280WH	2560WH	4800WH
Solar Input			
Max. PV Power	550W	6200W	6500W
Range Of Charging Voltage	20-150VDC	60-450VDC	60-450VDC
Rated Charge Current	80A	120A	120A
Physical			
Heat Dissipation/Cooling	Temperature control by intelligent exhaust fan		
Display	Digital LCD		
Electricity Charging	Yes		
External Size: W*D*H (mm)	321*491*140.5mm	441*701*231mm	441*701*231mm
Package Size: W*D*H (mm)	570*390*230mm	810*540*340mm	810*540*340mm

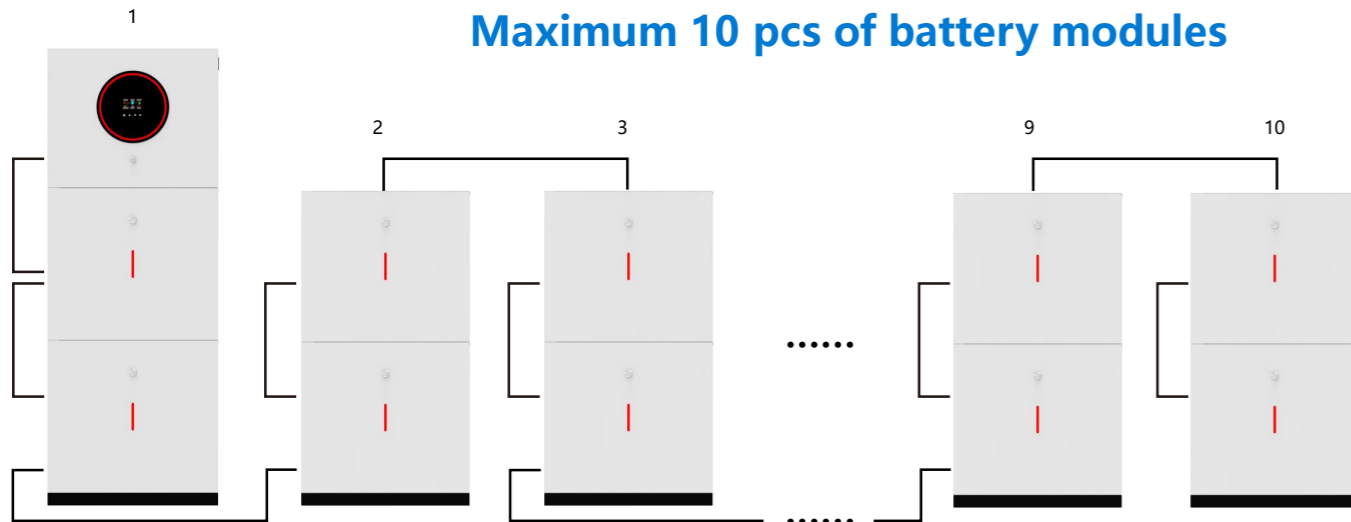
ENERGY STORAGE SYSTEM (AN-HPS SERIES)



Features of Module

- Pure sine wave solar inverter(on/off Grid)
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Built-in 120A MPPT Solar charge:max 4200W(for 3.6KW), max 6000W(for 5KW)
- High PV input voltage range(90-500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output

Maximum 10 pcs of battery modules



Model	AN-HPS3600	AN-HPS6200
Phase	1-phase	
Maximum PV Input Power	6200W	6500W
Rated Output Power	3600W	6200W
Maximum Solar Charging Current	120A	120A
GRID-TIE OPERATION		
PV Input(DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	90-500VDC	
Number of MPPT Trackers/Maximum Input Current	1/23A	
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195.5-253VAC	
Nominal Output Current	15.7A	27.0A
Power Factor	>0.99	
Feed-in Grid Frequency Range	49~51±1Hz	
EFFICIENCY		
Maximum Conversion Efficiency(Sload to AC)	98%	
TWO LOAD OUTPUT POWER(V2.0)		
Full Load	3600W	6200W
Maximum Main Load	3600W	6200W
Maximum Second Load(battery mode)	1200W	2067W
Main Load Cut Off Voltage	22VDC	44VDC
Main Load Return Voltage	26VDC	52VDC
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	30A	50A
Nominal operating frequency	50/60Hz	
Surge power	7200W	12400W
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure sine wave	
Efficiency(DC to AC)	94%	
BATTERY & CHARGER		
Nominal DC Voltage	24VDC	48VDC
Maximum Charging Current (Solar to AC)	120A	120A
Maximum AC Charging Current	100A	
GENERAL		
PHYSICAL		
Dimension,D x W x H(mm)	420*310*110	
Cartoon Dimension,D X W XH(mm)	500*310*180	
Net Weight(kgs)	8.8	9.8
Gross Weight(kgs)	10	11
INTERFACE		
Communication Port	RS232/WIFI/GPRS/LITHIUM BATTERY	

LIFEPO4 LITHIUM SOLAR BATTERY (AN-LPB-T)



Key Features

- Long service life over 5 years
- Modular design, small size, and lightweight
- One key switch machine, the operation is more convenient
- Suitable for long-term charge and discharge cycles
- Adopt multi-level energy consumption management
- Multiple parallel machines, automatic address acquisition without manual operation
- Support high-current charging and discharging
- Front operation and front wiring are convenient for installation and maintenance
- Adopt high-performance processor, international brand devices, high reliability
- Multiple communication interfaces: RS485, RS232, CAN
- Highly compatible BMS, seamless connection with energy storage inverter
- Perfectly compatible with our inverter
- Safety certification: CE, ROHS, UN38.3, MSDS, etc

Model	AN-LPB-T-24100	AN-LPB-T-24200	AN-LPB-T-48100	AN-LPB-T-48200	AN-LPB-T-48300
Battery Type	LiFePO4				
Rating Voltage	25.6V	25.6V	48V	48V	48V
Capacity	100AH	200AH	100AH	200AH	300AH
Charge Voltage	29.2V	29.2V	54.75V	54.75V	54.75V
Charge Current	100A	100A	100A	100A	200A
Impedance	≤30mΩ (Max)				
Charging Mode	CC/CV				
Charging Method	Standard Charging 0.2C(Charging Current :20A); Fast Charging 0.5C(Charging Current :50A)				
Rated Discharge Current	≤100A,Maximum discharge current 120A				≤200A,Maximum discharge current 200A
Over Current	130A	130A	130A	130A	200A
Short Circuit	Recover after removing the short circuit load				
Operating Consumption Current	50mA (Max)				
Operating Temperature	Charge: 0-+55°C; Discharge: -20-+60°C				
Storage Temperature	-20-+40°C				
Cycle Life	3000 cycle@Percentage of recoverable capacity 80%				
Dimensions	410*370*155mm	570*410*165mm	570*410*210mm	620*410*230mm	455*350*810mm
Weight	28kg	45kg	45kg	90kg	120kg
Communication Mode	RS232、CAN、RS485				
Shipped Product Charge	50%-60% battery volume delivery				
Protection & Alarm	Over temperature, overcurrent, short circuit, overcharge, overdischarge, etc.				
Cooling Method	Natural cooling				
Certification	CE, ROHS, UN38.3, MSDS				
IP Grade	IP54				

LIFEPO4 LITHIUM SOLAR BATTERY (AN-LPB-N)



Key Features

- Long service life over 8 years
- Modular design, small size, and lightweight
- With one key switch machine, the operation is more convenient
- Suitable for long-term charge and discharge cycles
- Adopt multi-level energy consumption management
- Multiple parallel machines, automatic address acquisition without manual operation
- Support high-current charging and discharging
- Front operation and front wiring are convenient for installation and maintenance
- Adopt high-performance processors, international brand devices, high reliability
- Multiple communication interfaces: RS485, RS232, CAN
- Highly compatible BMS, seamless connection with energy storage inverter
- Perfectly compatible with our inverter
- Safety certification: CE, ROHS, UN38.3, MSDS, etc

Model	AN-LPB-N-24100	AN-LPB-N-24200	AN-LPB-N-48100	AN-LPB-N-48200	AN-LPB-N-48280 (Floor type)
Battery Type	LiFePO4				
Typical Voltage	25.6V	25.6V	51.2V	51.2V	51.2V
Typical Capacity	100AH	200AH	100AH	200AH	280AH
Voltage Working Range	22.4-29.2V	22.4-29.2V	44.8-58.4V	44.8-58.4V	44.8-58.4V
Energy Storage	2.56Kwh	5.12Kwh	5.12Kwh	10.24Kwh	14.33Kwh
Impedance	≤30mΩ (Max)				
Charging Mode	CC/CV				
Charging Method	Standard Charging 0.2C(Charging Current :20A); Fast Charging 0.5C(Charging Current :50A)				
Rated Discharge Current	≤100A,Maximum discharge current 120A				
Short Circuit	Recover after removing the short circuit load				
Operating Consumption Current	50mA (Max)				
Operating Temperature	Charge: 0-+55°C; Discharge: -20-+60°C				
Storage Temperature	-20-+40°C				
Cycle Life	6000 cycle@Percentage of recoverable capacity 80%				
Dimensions	410*370*160mm	570*410*160mm	570*410*160mm	860*485*160mm	455*350*810mm
Weight	28kg	45kg	45kg	89kg	120kg
Communication Mode	RS232、CAN、RS485				
Shipped Product Charge	50%-60% battery volume delivery				
Protection & Alarm	Over temperature, overcurrent, short circuit, overcharge, overdischarge, etc.				
Cooling Method	Natural cooling				
Certification	CE, ROHS, UN38.3, MSDS				
IP Grade	IP54				

RACK LIFEPO4 LITHIUM BATTERY (AN-LPB-R)



Key Features

- Modular design, small size and light weight
- One key switch machine, the operation is more convenient
- Suitable for long-term charge and discharge cycles
- Adopt multi-level energy consumption management
- Multiple parallel machines, automatic address acquisition without manual operation
- Support high-current charging and discharging
- Front operation and front wiring are convenient for installation and maintenance
- Adopt high-performance processor, international brand devices, high reliability
- Safety certification: CE, ROHS, UN38.3, MSDS, etc

Model	AN-LPB-R-24100	AN-LPB-R-24200	AN-LPB-R-48100	AN-LPB-R-48200
Battery Type	LiFePO4			
Typical Voltage	25.6V	25.6V	48V	48V
Typical Capacity	100AH	200AH	100AH	200AH
Voltage Working Range	22.4-29.2V	22.4-29.2V	42-54.8V	42-54.8V
Energy Storage	2.56Kwh	5.12Kwh	4.8Kwh	9.6Kwh
Working Temperature	Charge: 0-+55°C; Discharge: -20-+60°C			
Storage Temperature	-20-+40°C			
Standard Charge Current	0.5C			
Max. Charge Current	200A	250A	200A	250A
Max. Discharge Current	200A	250A	200A	250A
SOC Accuracy	<8%			
Dimension(mm)	270*240*220	490*240*220	490*240*220	490*450*220
Weight(kg)	25kg	45kg	42kg	76kg
IP Grade	IP54			
Cooling	Nature			
Certifications	CE, ROHS, UN38.3, MSDS			

12V LIFEPO4 LITHIUM BATTERY (AN-LFP)



Key Features

- **Longer Cycle Life:** Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.
- **Lighter Weight:** About 30% of the weight of a comparable lead acid battery. A "drop in" replacement for lead acid batteries.
- **Higher Power:** Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.
- **Wider Temperature Range:** -20°C~60°C
- **Superior Safety:** Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact overcharging or short circuit situation

Model	AN-LFP1250	AN-LFP12100	AN-LFP12200
Battery Type	LiFePO4		
Typical Voltage	12.8V		
Typical Capacity	50AH	100AH	200AH
Voltage Working Range	10-14.6V		
Energy Storage	640WH	1280WH	2560WH
Working Temperature(°C)	Charge: 0-+55°C; Discharge: -20-+60°C		
Storage Temperature(°C)	-20-+40°C		
Max. Charge Current	50A	100A	200A
Max. Discharge Current	50A	100A	200A
SOC Accuracy	<8%		
Dimension	225*147*183	330*172*215mm	520*217*225mm
Weight	5.5kg	11kg	22kg
IP Grade	IP54		
Certifications	CE, ROHS, UN38.3, MSDS		

DEEP CYCLE GEL SOLAR BATTERY (AN-GEL12 SERIES)



Features and Benefits

- This energy storage battery utilizes gel electrolyte technology. The uniformly distributed gel electrolyte is made by mixing sulfuric acid with silica fume.
- The electrolyte can hold the battery plates securely in an immobile gel
- Radial grid design offers this power storage device excellent discharge performance
- Due to 4BS lead paste technology, our deep cycle gel battery provides long-lasting service life
- Employing unique grid alloy, special gel formulation and distinct positive and negative lead paste ratio, the maintenance free battery boasts outstanding deep cycle service performance and over-discharge recovery ability.
- Completely manufactured from high purity raw materials, Anern deep cycle gel battery has extremely low self-discharge
- Gas recombination technology ensures excellent seal reaction efficiency, thus delivering no pollution such as acid mist to the environment
- The gel VRLA battery boasts reliable sealing technology which enables security seal performance

Battery Type	Voltage (V)	Capacity (10HR)	Dimensions-Millimeters (±2mm)				ApproxWeight (Kg)	Internal Resistance 25°C
			L	W	H	TH		
AN-GEL12-2.6	12	2.6	71	47	96	102	0.80	56mΩ
AN-GEL12-3	12	3	91	71	100	106	1.25	50mΩ
AN-GEL12-3.5	12	3.5	91	71	100	106	1.32	45mΩ
AN-GEL12-4	12	4	91	71	100	106	1.38	41mΩ
AN-GEL12-4.5	12	4.5	91	71	100	106	1.44	40mΩ
AN-GEL12-5	12	5	91	71	100	106	1.48	39mΩ
AN-GEL12-5.5	12	5.5	91	71	100	106	1.62	37mΩ
AN-GEL12-6	12	6	149	65	96	102	1.90	21.3mΩ
AN-GEL12-7	12	7	149	65	96	102	2.02	21.3mΩ
AN-GEL12-7.5	12	7.5	149	65	96	102	2.13	21.0mΩ
AN-GEL12-9	12	9	149	65	96	102	2.38	19.8mΩ
AN-GEL12-12	12	12	150	98	97	102	3.22	20mΩ
AN-GEL12-17	12	17	181	77	167	-	4.96	18mΩ
AN-GEL12-18	12	18	181	77	167	-	5.25	17mΩ
AN-GEL12-24Y	12	26	165	175	124	-	7.50	13mΩ
AN-GEL12-24P	12	24	166	125	175	-	8.10	13mΩ
AN-GEL12-33	12	32	195	130	156	168	9.70	11mΩ
AN-GEL12-40	12	40	197	165	175	-	12.50	9mΩ
AN-GEL12-50	12	50	228	138	211	215	16.20	8mΩ
AN-GEL12-55	12	55	228	138	211	215	16.90	7mΩ
AN-GEL12-65	12	65	350	166	180	-	20.20	6mΩ
AN-GEL12-80	12	80	258	168	210	214	23.50	5.6mΩ
AN-GEL12-100	12	100	327	172	211	215	26.20	5.0mΩ
AN-GEL12-120	12	120	406	174	210	234	32.90	4.3mΩ
AN-GEL12-150	12	150	484	171	240	-	38.00	3.8mΩ
AN-GEL12-200	12	200	524	238	220	224	55.50	3.2mΩ
AN-GEL12-250	12	250	520	268	219	223	65.50	2.5mΩ

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SOLAR LIGHTING





TABLE OF CONTENT

- >>> Solar Street Light
- >>> Solar Garden Light
- >>> Solar Flood Light



ABOUT ANERN

Anern is a high-tech industrial company specialized in R&D and manufacturing of renewable energy products and outdoor solar lights. Established in 2009, Anern Factory boasts a standard solar street light production line and a strong expert team of management, development, manufacturing and marketing.

As a global leader in solar lighting, Anern insists the in-depth understanding of customer needs and adopts the advanced technology and design into each solution of our lighting products.

Anern Solar Street lights have been applied and installed in over 100 countries in Africa, Europe, South America, Southeast Asia, and the Middle East, etc. The Stable product quality and excellent service have won unanimously high praise from our customers both domestic and abroad.





Key Features

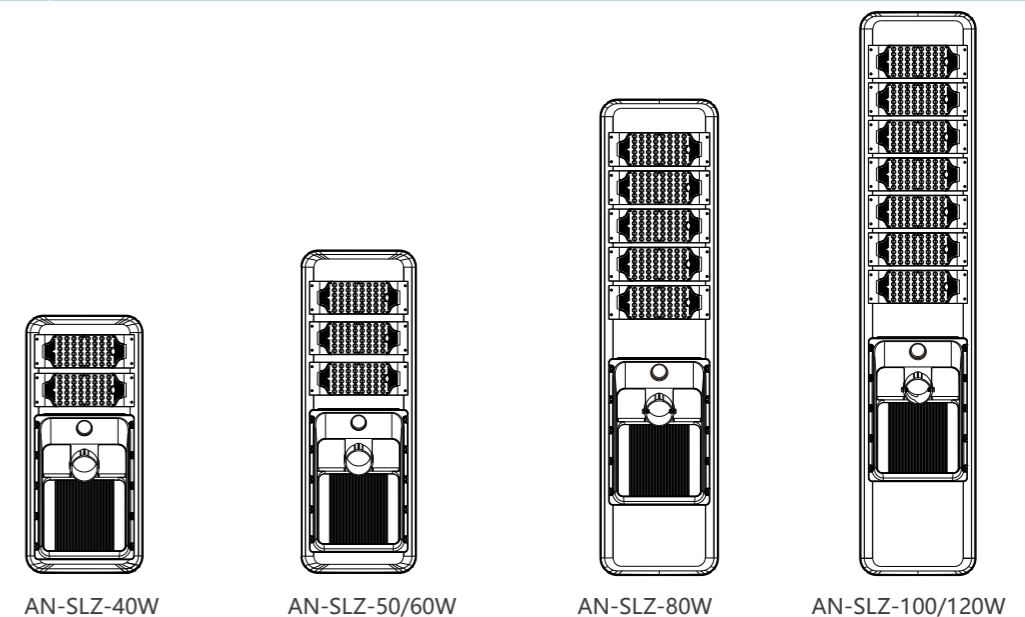
- Elegant all in one structure design, saving transportation cost, easy to install and convenient for maintenance
- 140° wide lighting angle covering wider road area
- Die-cast aluminum bracket, high mechanical strength, anti-wind resistance of level-16
- High power, enlarged capacity led module design, equipped with high-brightness LED chips, improving the brightness by 30%
- Remote control, four lighting modes for choice, flexible to switch via remote control
- Adopt high-efficiency mono solar panel and new lithium battery
- Self-developed intelligent control system, ensure the lighting time and stability

Technical Indexes

Power	40W	50W	60W	80W	100W	120W
Number of LED	96pcs	144pcs	144pcs	240pcs	336pcs	336pcs
LED Luminous	210lm/w					
Battery(LiFePO4)	12.8V24AH	12.8V36AH	12.8V42AH	12.8V54AH	12.8V60AH	12.8V72AH
Solar Panel(Mono)	18V65W	18V70W	18V80W	18V100W	18V130W	18V140W
Solar Charge Time	6-8 hours by bright sunlight					
Backup In Rainy Day	>3 days (Motion sensor mode)					
Lighting Mode	100% light control, Time control, Microwave control, Time & Microwave control					
PIR	120°, >8m					
Size(mm)	848*385*139	1078*385*139	1078*385*139	1548*385*139	1868*385*139	1868*385*139
Material	Aluminium + PMMA					
IP Class	IP66					
IK Class	IK09					
Working Temperature	0°C to 65°C					

AN-SLZ

ENGINEERING LIGHTING FIRST CHOICE





Key Features

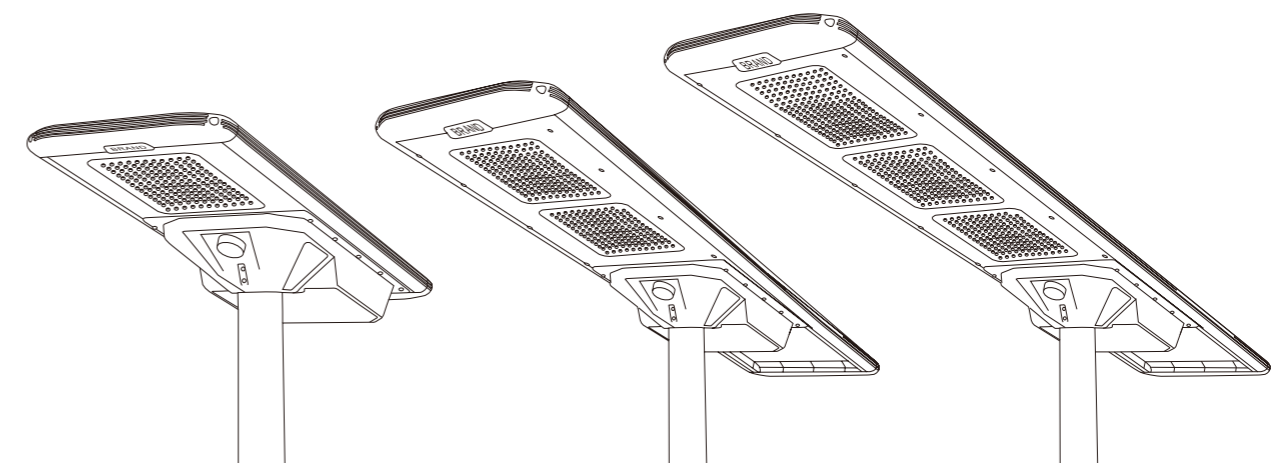
- Elegant All-in-One Design, Aluminum alloy case;
- Photocell Control + Microwave motion sensor Control + Remote Control;
- 140° wide lighting angle, enlarged LED module;
- Support 4-5 nights lighting after full charging;
- Easy to install and Auto on/off/sensor

Technical Indexes

Power	40W	60W	80W	100W	120W	150W
Number of LED	162pcs	162pcs	324pcs	324pcs	486pcs	486pcs
LED Luminous	210lm/w					
Battery(LiFePO4)	320WH	384WH	480WH	640WH	768WH	960WH
Solar Panel(Mono)	65W	80W	90W	120W	140W	150W
Solar Charge Time	8-9 hours by bright sunlight					
Lighting Time	4-5 nights					
Lighting Mode	Photocell Control + Microwave motion sensor Control + Remote Control					
Material	Aluminium + PMMA					
Size(mm)	890*382*100	1115*382*100	1430*382*100	1690*382*100	1960*382*100	2200*382*100
IP Class	IP66					
IK Class	IK09					
Working Temperature	0°C to 65°C					
Warranty	5 Years					

AN-SLV

ENGINEERING LIGHTING FIRST CHOICE



AN-SLV-40W/60W

AN-SLV-80W/100W

AN-SLV-120W/150W



Key Features

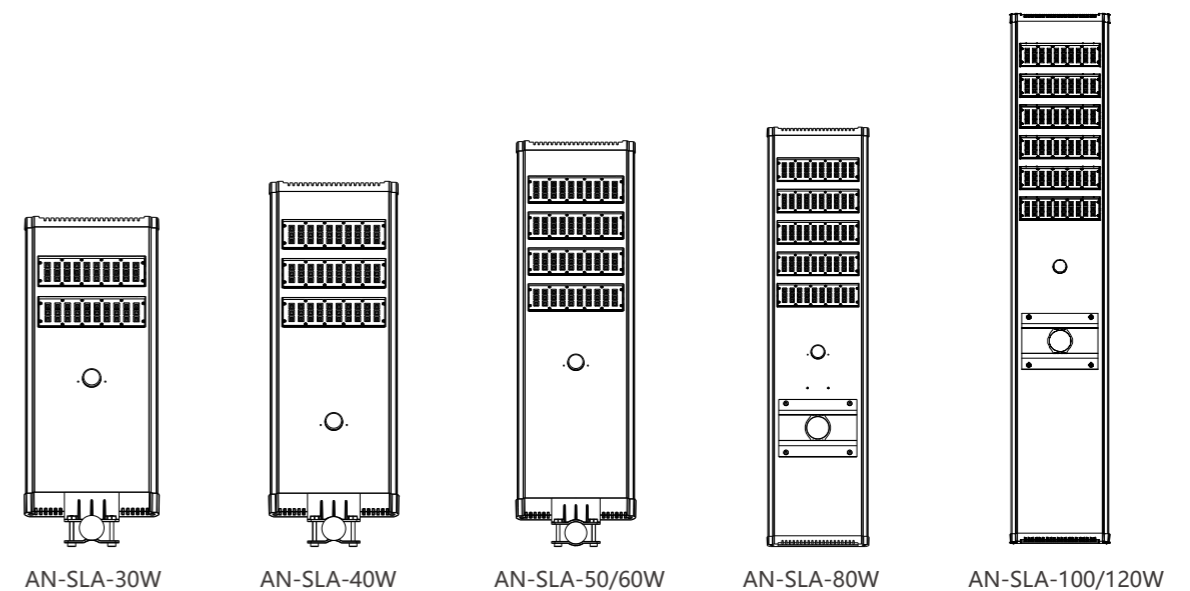
- Elegant all in one structure design, saving transportation cost, easy to install and convenient for maintenance
- 140° wide lighting angle covering wider road area
- Adjustable angle LED module design
- Die-cast aluminum bracket, high mechanical strength, anti-wind resistance of level-16
- Remote control, four lighting modes for choice, flexible to switch via remote control
- Adopt high-efficiency mono solar panel and new lithium battery
- Self-developed intelligent control system, ensure the lighting time and stability

Technical Indexes

Power	30W	40W	50W	60W	80W	100W	120W
Number of LED	60pcs	90pcs	120pcs	120pcs	150pcs	180pcs	180pcs
LED Luminous	210lm/w						
Battery(LiFePO4)	12.8V18AH	12.8V24AH	12.8V36AH	12.8V42AH	12.8V54AH	12.8V60AH	12.8V72AH
Solar Panel(Mono)	18V50W	18V65W	18V70W	18V80W	18V100W	18V130W	18V140W
Solar Charge Time	6-8 hours by bright sunlight						
Backup In Rainy Day	>3 days (Motion sensor mode)						
Lighting Mode	100% light control, Time control, Microwave control, Time & Microwave control						
Size(mm)	755*370*175	895*370*175	1125*370*175	1125*370*175	1540*370*335	1860*370*335	1860*370*335
PIR	120°, >8m						
Material	Aluminium + PMMA						
IP Class	IP65						
IK Class	IK09						
Working Temperature	0°C to 65°C						

AN-SLA

PATENTED DESIGN SOLAR STREET LIGHT





Key Features

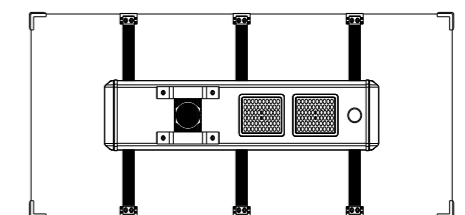
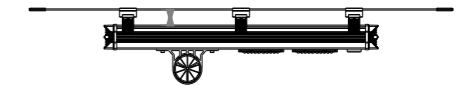
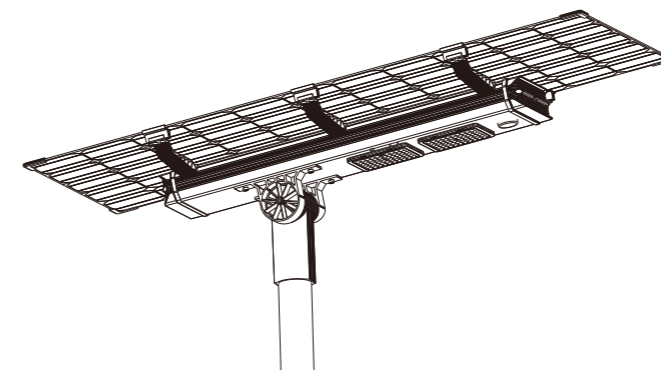
- Independent design of double-sided solar panel, increase power generation up to 30%
- 140° lighting angle covering wider road area
- Adjustable bracket, 180 degree arbitrary adjustment, suitable for different installation way
- Die-cast aluminum bracket, high mechanical strength, Level-16 anti-wind resistance
- Remote control, four lighting modes for choice, flexible to switch via remote control
- Adopt high-efficiency mono solar panel and new lithium battery
- Independent developed intelligent control system, ensure the lighting time and stability
- Big power up to 200W, specially design for project

Technical Indexes

Power	60W	80W	100W	120W	150W	200W
Number of LED	80pcs	80pcs	120pcs	120pcs	120pcs(5050)	120pcs(5050)
LED Luminous	210lm/w					
Battery(LiFePO4)	12.8V42AH	12.8V54AH	12.8V60AH	12.8V72AH	12.8V90AH	25.6V66AH
Solar Panel(Mono)	18V120W	18V140W	18V160W	18V180W	18V220W	36V260W
Solar Charge Time	6-8 hours by bright sunlight					
Backup In Rainy Day	>3 days (Motion sensor mode)					
Lighting Mode	100% light control, Time control, Microwave control, Time & Microwave control				Time control	
Lamp Size(mm)	970*236*85	1078*385*139	1078*385*139	1548*385*139	1868*385*139	1868*385*139
Solar Panel Size(mm)	1070*517	1280*517	1140*675	1260*675	1560*675	1980*675
PIR	120°, >8m					
Material	Aluminium + PMMA					
IP Class	IP65					
IK Class	IK09					
Working Temperature	0°C to 65°C					

AN-SLX

TOP PERFORMANCE OF THE INDUSTRY





AN-SSL-T

SPLIT TYPE SOLAR STREET LIGHT

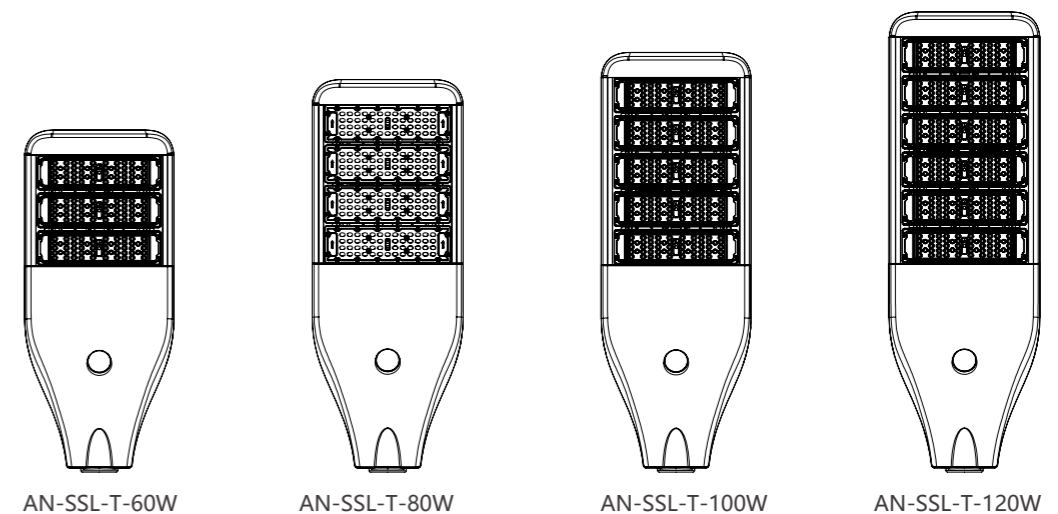


Key Features

- All in two design, one step plug-in for wiring connection, easy to install and maintain
- 140° lighting angle, covering wider road area
- Independent design of solar panel, can increase power generation up to 30%
- Die-cast aluminum bracket, high mechanical strength, Level-16 anti-wind resistance
- Remote control, three lighting modes for choice, flexible to switch via remote control
- Adopt high-efficiency mono solar panel and LiFePO4 lithium battery
- Independent developed intelligent control system, ensure the lighting time and stability

Technical Indexes

Power	60W	80W	100W	120W
Number of LED	150pcs	200pcs	250pcs	300pcs
LED Luminous	210lm/w			
Battery(LiFePO4)	538WH	692WH	768WH	922WH
Solar Panel(Mono)	18V80W	18V100W	18V150W	18V200W
Solar Charge Time	6-8 hours by bright sunlight			
Backup In Rainy Day	>3 days (Motion sensor mode)			
Lighting Mode	100% light control, Time control, Microwave control			
Lamp Size(mm)	690*290*130	760*290*130	840*290*130	920*290*130
Solar Panel Size(mm)	710*670	870*670	1280*670	1130*990
PIR	120°, >8m			
Material	Aluminium + PMMA			
IP Class	IP65			
IK Class	IK09			
Working Temperature	0°C to 65°C			





AN-ISSL-C

NEWLY UPGRADED INTEGRATED SOLAR LIGHT

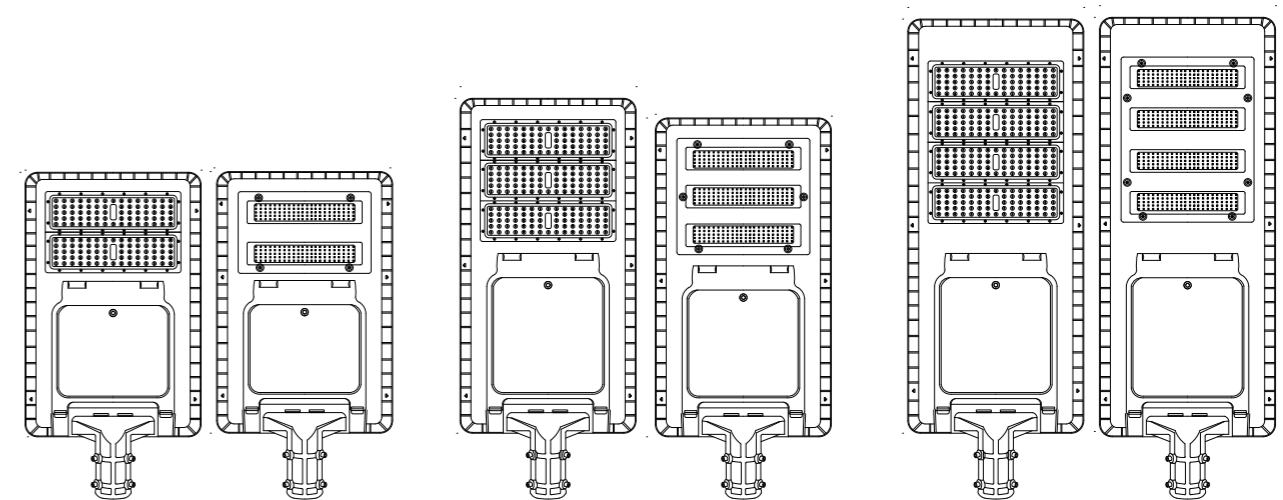


Key Features

- Elegant all in one structure design, saving transportation cost, easy to install and convenient for maintenance
- 140° wide lighting angle covering wider road area
- Adjustable angle lamp arm, can be used in two different types of lamp pole
- Die-cast aluminum bracket, high mechanical strength, anti-wind resistance of level-16
- Snap-type battery box design, convenient for battery and controller maintenance
- Adopt high-efficiency mono solar panel and LiFePO4 lithium battery
- Self-developed intelligent control system, ensure the lighting time and stability

Technical Indexes

Power	60W	80W	100W
Number of LED	144pcs	216pcs	288pcs
LED Luminous		150lm/w	
Battery(LiFePO4)	128WH	160WH	192WH
Solar Panel(Mono)	30W	40W	50W
Solar Charge Time	5-6 hours by bright sunlight		
Backup In Rainy Day	>3 days (Motion sensor mode)		
Lighting Mode	Time control		
Lamp Size(mm)	640*360*100	800*360*100	960*360*100
PIR	120°, >6m		
Material	Aluminium + PMMA		
IP Class	IP65		
IK Class	IK09		
Working Temperature	0°C to 65°C		



AN-ISSL-C-60W

AN-ISSL-C-80W

AN-ISSL-C-100W



AN-SFL02
SOLAR FLOOD LIGHT



Technical Indexes

Power	50W	100W	200W	300W	400W	500W
Number of LED	81pcs	144pcs	216pcs	216pcs	432pcs	432pcs
LED Luminous	160lm/w					
Battery(LiFePO4)	3.2V5000mah	3.2V15000mah	3.2V20000mah	3.2V30000mah	3.2V40000mah	3.2V50000mah
Solar Panel	6W	15W	20W	30W	40W	50W
Solar Charge Time	6-8 hours by bright sunlight					
Backup In Rainy Daye	>2 days (Microwave control)					
Lighting Mode	100% light control, Time control, Microwave control					
Lamp Size	210*175*50mm	260*200*50mm	310*255*50mm	310*255*50mm	370*310*65mm	370*310*65mm
Solar Panel Size	265*175*18mm	400*350*18mm	420*370*18mm	630*250*25mm	670*445*25mm	670*540*30mm
Material	Aluminium + PMMA					
IP Class	IP65					



AN-SFL-AG
SOLAR FLOOD LIGHT

Technical Indexes

Power	50W	100W	150W	200W	250W	300W
Number of LED	28pcs	60pcs	60pcs	60pcs	126pcs	126pcs
LED Luminous	220lm/w					
Battery(LiFePO4)	3.2V6000mah	3.2V10000mah	3.2V15000mah	3.2V20000mah	3.2V25000mah	3.2V30000mah
Solar Panel	6W	10W	15W	20W	25W	30W
Solar Charge Time	6-8 hours by bright sunlight					
Backup In Rainy Daye	>2 days (Microwave control)					
Lighting Mode	100% light control, Time control, Microwave control					
Lamp Size	168*126*35mm	230*172*39mm	230*172*39mm	230*172*39mm	298*225*41mm	298*225*41mm
Solar Panel Size	210*200*17mm	210*340*17mm	390*235*17mm	390*300*17mm	390*360*17mm	390*430*17mm
Material	ABS Plastic					
IP Class	IP65					



Solar Garden Light

AN-ISGL05

Power	60W	120W	180W
Number of LED	210pcs	600pcs	720pcs
LED Luminous	140lm/w		
Battery(LiFePO4)	3.2V10000mah	3.2V15000mah	3.2V20000mah
Solar Panel	12W	18W	24W
Solar Charge Time	6-8 hours by bright sunlight		
Backup In Rainy Day	>2 days (Microwave control)		
Lighting Mode	100% light control, Time control, Microwave control		
Lamp Size	410*200*70mm	650*265*70mm	775*290*70mm
Material	Aluminium		
IP Class	IP65		



AN-ISGL08

Power	300W	400W	500W
Number of LED	392pcs	539pcs	686pcs
LED Luminous	130lm/w		
Battery(LiFePO4)	3.2V15000mah	3.2V20000mah	3.2V30000mah
Solar Panel	16W	25W	30W
Solar Charge Time	6-8 hours by bright sunlight		
Backup In Rainy Day	>2 days (Microwave control)		
Lighting Mode	100% light control, Time control, Microwave control		
Lamp Size	380*530*80mm	390*650*80mm	400*730*80mm
Material	ABS Plastic		
IP Class	IP65		



AN-ISGL09

Power	50W	100W	150W	200W
Number of LED	60pcs	90pcs	120pcs	150pcs
LED Luminous	220lm/w			
Battery(LiFePO4)	3.2V5000mah	3.2V10000mah	3.2V15000mah	3.2V20000mah
Solar Panel	5W	10W	15W	20W
Solar Charge Time	6-8 hours by bright sunlight			
Backup In Rainy Day	>2 days (Microwave control)			
Lighting Mode	100% light control, Time control, Microwave control			
Lamp Size	394*235*48mm	506*242*48.5mm	634*258*52.5mm	717*270*53mm
Material	ABS Plastic			
IP Class	IP65			



MEGA PROJECTS

>>> Over the past 10 years, Anern has successfully completed hundreds of mega government projects in more than 100 countries.



PRODUCTION LINE

>>> Anern has specialized production lines, through international standard management and strict quality control to ensure the stable-performance and high-quality solar products.



HONOR & CERTIFICATES

>>> Since its establishment, Anern has been awarded with many honors and has more than 20 patents for self-developed products.



SOLAR LIGHTING EXPERT

