PV MODULE-LEVEL PRECISE MANAGEMENT SOLUTION

Safety / Optimization / Efficiency

And Solar, And All

AndSolar Technology Co., Ltd.

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Company Profile

AndSolar Technology is a tech-company engaged in photovoltaic module-level power electronics (MLPE) and distributed photovoltaic smart energy solutions. The company's products cover Smart Rapid Shutdown Device, Smart Power Optimizer, Smart DC Module, Smart Inverter, Gateway and AndSolar Cloud, aiming to provide safe, smart and efficient products for global users.

Based on photovoltaic systems, IoT modules, power electronics, and digital platforms, AndSolar is able to deliver module-level precise management for distributed PV plants. This integrated method enhances safety and O&M efficiency while maximizing the energy yield potential of the power plants. Committed to driving innovation, AndSolar will advance global renewable energy development and play a reliable partner for users around the world.

1GW
Annual Production Capacity

400%
Annual Business Growth

30+
Countries Covered

R&D

- Led by senior industry experts, the team has vast experience in innovation-driven R&D and mass production of photovoltaic power electronics and IoT products
- Multiple R&D sectors are cross-driven to jointly innovate product and overcome R&D barriers

Comprehensive Understanding

- Expertise extends across the entire photovoltaic value chain
- Vast experience in the application of integrated solutions of distributed photovoltaic system, energy storage, load management and BIPV systems

Market Competitiveness

- Professional sales and technical team covering project development, asset management and after-sales services
- Sales channels cover various regions including Asia, Europe South America, North America, Oceania, and Africa

Forward-Thinking Technology

- Professional vision to prepare for future competitiveness
- A keen awareness of emerging and leading PV technologies
- Global view of PV technology and market trends

Company History

2021

- Complete market investigation and analysis to determine product development direction
- Gather multiple talents and form a core team

2022

- Found in Suzhou
- Angel investment
- Our team members have over 15 years of photovoltaic industry experience

K2VC

2023 H1

- Completed Pre-A round of tens of millions of financing
- Set up the Smart RSD project
- Set up the Gateway project
- Set up the Andsolar cloud project

MPCi

2023 H2

- Smart RSD&Gateway passed global mainstream certification and started mass production
- Andsolar Cloud 1.0 version officially released
- Domestic bulk orders, and multiple demonstration projects built overseas
- Set up the Smart Optimizer project



2024 H1

- Smart RSD are being shipped in bulk overseas, with MW level projects landing in the Thai market
- Smart optimizer passed global mainstream certifications
- Andsolar Cloud 2.0 version officially released
- Second generation Gateway R&D project approved



2024 H2

- Cumulated shipment of 100,000 sets
- Smart optimizer in mass production, receiving a large number of orders
- The second generation Gateway is in mass production
- Completed the A round of financing of tens of millions with a total financing of nearly 100 million
- Won the first prize in the Energy Electronics Industry Innovation Competition held by the Ministry of Industry and Information Technology

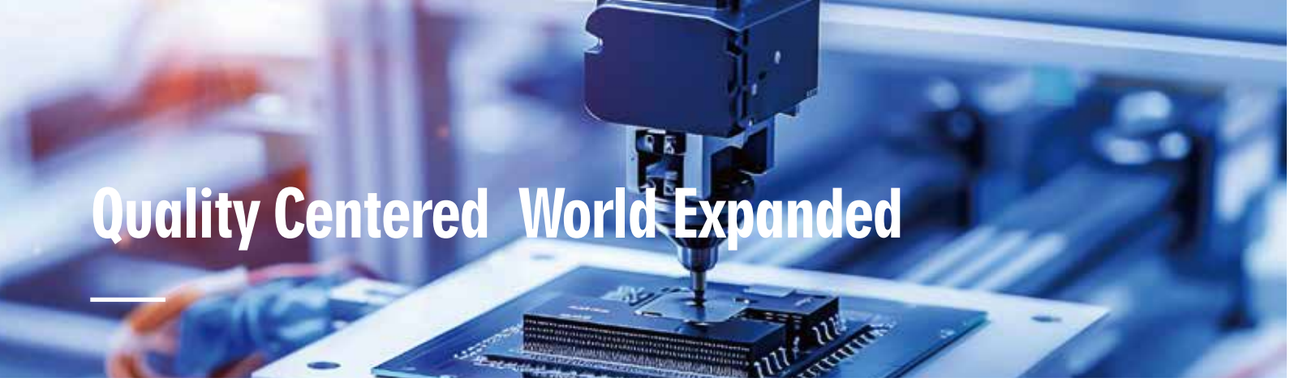
MEIKE

Cumulated shipment
100,000 Sets

2025

- Rotatable smart 1 to 2 RSD in mass production
- Rotatable smart 1 to 4 RSD in mass production
- Rotatable smart 1 to 2 optimizer in mass production
- Smart DC module officially released
- Smart inverter R&D and mass production
- Market expansion to Europe, Australia , and South America
- Establish overseas subsidiaries and set up the first overseas after-sales service station





Quality Centered World Expanded

Company Location Project Location

6
Continents Coverage

30+
Countries and Regions

1,000+
Global Customers

Suzhou Factory

Suzhou Headquarte

Shanghai Branch Office

AndSolar

Professional Design

- Strict component selection standards ensure long-term stability and reliability of the product
- Professional electrical and hardware design, taking EMC, heat dissipation and surge protection into account
- Product's function and safety have passed global mainstream certificates
- Environmental adaptability design meets high protection, wide temperature range, and corrosion resistance

Rigorous Test

- AndSolar Lab implements reliability tests far beyond standard severity
- TC400 (Thermal Cycle Test)
  Testing condition: -40℃~+85℃, 400 cycles, 2 x IEC standard
- HF10 (Humidity Freeze Test)
  Testing condition: -40℃~+85℃, 85%RH, 10 cycles, around 240hrs
- DH3000 (Demp Heat Test)
  Testing condition: 85℃, 85%RH, 3000 hrs, 3 x IEC standard

*Testing methods fulfill IEC 61215/61730 standards

Strict Control

- Strict control of key processes such as SMT, high-precision welding, and glue filling
- Each key process of the product has passed tests such as FCT, AOI, conductivity, sealing and other tests
- Products have 100% passed high temperature aging and rated stress tests before shipment

Continuous Upgrade

- Continuously collect feedback from market and users, keep upgrading products
- Provide OTA support throughout the product life cycle to continuously improve user experience

Pursuing Excellent Quality

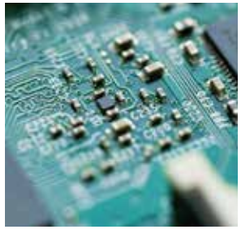
AndSolar R&D team consists of experts from PV technology, power electronics, energy IoT, and smart algorithms, all working together to develop solutions for worldwide customers. At the same time, AndSolar factory is equipped with automated production lines to ensure high-quality production.

15+ Years
R&D Experience

70%
R&D Team Ratio

99.9%
Production Yield

100%
100% aging test before shipment



AndSolar

Global Certifications

AndSolar products pass the certifications demanded in the main global markets and the pass rate of the initial certification reached 100%. Our systems are rigorously tested, ensuring the safety and efficiency of power plants worldwide.

ISO CSA US TUV NORD FC UK CA CE IP68

Solution-Commercial & Industrial

AndSolar Cloud

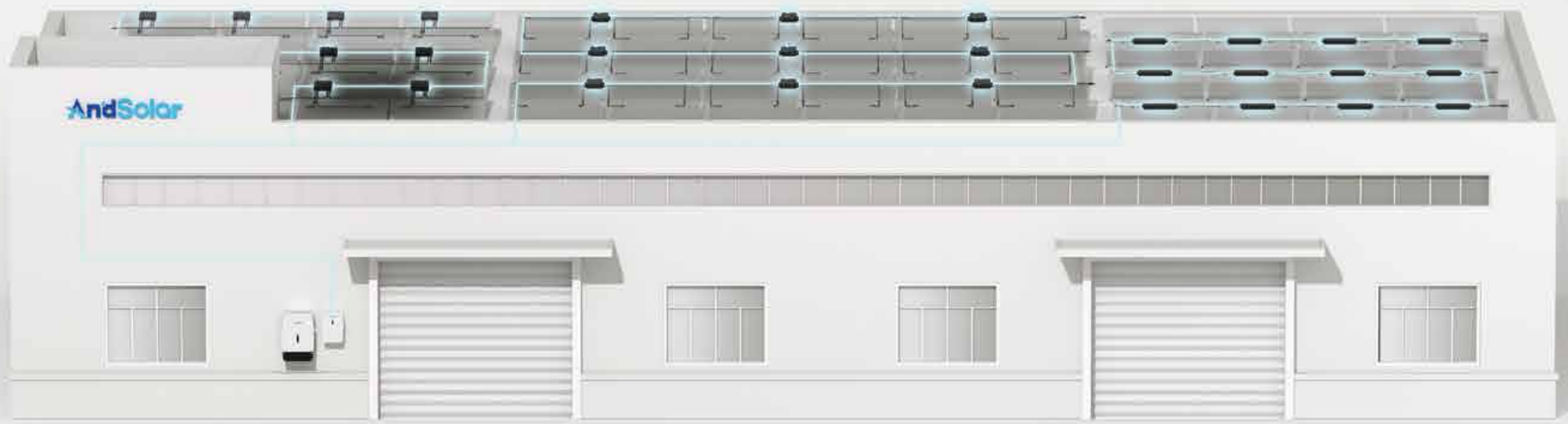
Smart Optimizer

Gateway

Smart RSD

Smart DC Module

Smart Inverter



Module-level optimization for increased system efficiency

Module-level positioning and diagnosis, to reduce O&M cost

Modular products for enhanced system design flexibility

Multiple protection for enhanced security solutions

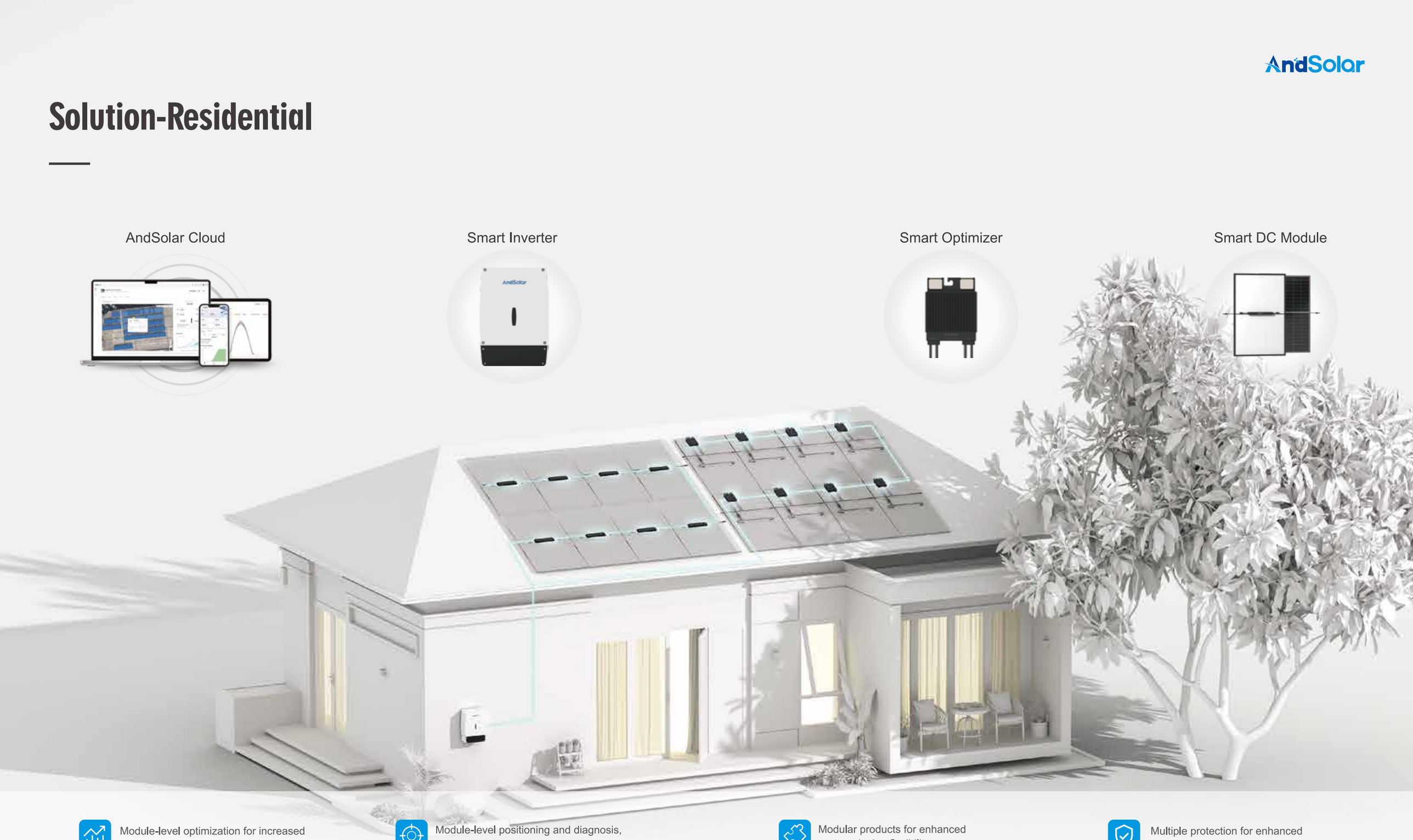
Solution-Residential

AndSolar Cloud

Smart Inverter

Smart Optimizer

Smart DC Module



Module-level optimization for increased system efficiency

Module-level positioning and diagnosis, to reduce O&M cost

Modular products for enhanced system design flexibility

Multiple protection for enhanced security solutions

AndSolar Cloud

Comprehensive Understanding of Every PV Module

Safety

Warning and auto-shutdown to prevent safety issue

Precision

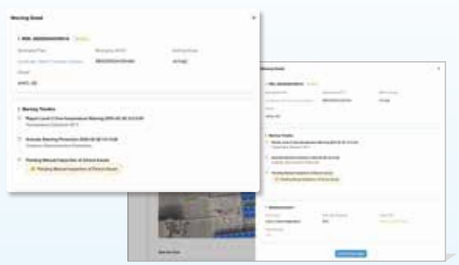
Precise module-level monitoring around 24/7

Efficiency

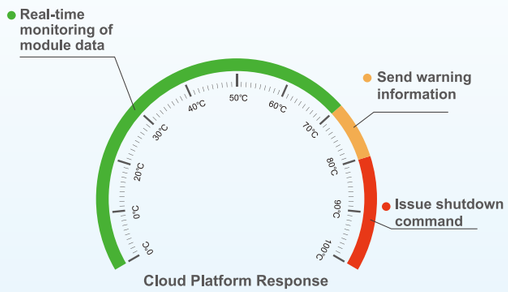
Significantly improve O&M efficiency by 50%

Safety Warning and auto-shutdown to prevent safety issue

- AI automatic diagnosis, prevents potential risks by active safety



Multi-channel instant alert

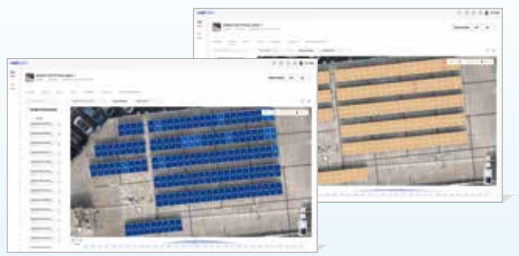


Cloud Platform Response

- Protect your power plant with remote shutdown anywhere and anytime

Precision Module-level monitoring around 24/7

- Data playback and locate problems



- Maximize ROI with AI integrated

*AndSolar AI will be available in Q4 2025

Efficiency Significantly improve O&M efficiency by 50%

- Reducing inspection frequency by module-level data monitoring

Traditional solution

Traditional photovoltaic power plants have low monitoring accuracy, and maintenance teams are required to conduct on-site inspections 2-3 times per quarter to ensure safety

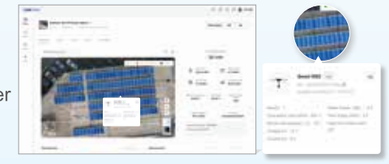
2~3 times/quarter

VS

AndSolar solution

AndSolar Cloud enables real-time monitoring of your PV system and module operation status, reducing inspection frequency

1 time/quarter



- 1:1 restoration of the actual power plant scene, remote troubleshooting

Traditional troubleshooting

If the capacity is 200kW with 350 modules, the investigation is expected to take 4 hours

4+ hours

VS

Remote troubleshooting

AndSolar Cloud→Warning List→Plant Details→Fault Location

Especially helpful for large-scale and operationally inconvenient projects

5 mins

- Module-level management, remote shutdown low-efficiency or faulty modules and improve revenue

Traditional management method

Unable to shutdown low efficiency modules in a timely manner results in reduced power generation efficiency of the power plant, requiring manual O&M, and increasing operating costs

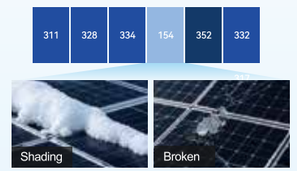
Reduce power plant revenue

VS

Module-level management

The faulty modules can be shutdown in time to improve the power generation efficiency, and the power plant problems can be solved together to save O&M costs

Improve power plant revenue



Smart Rapid Shutdown Device

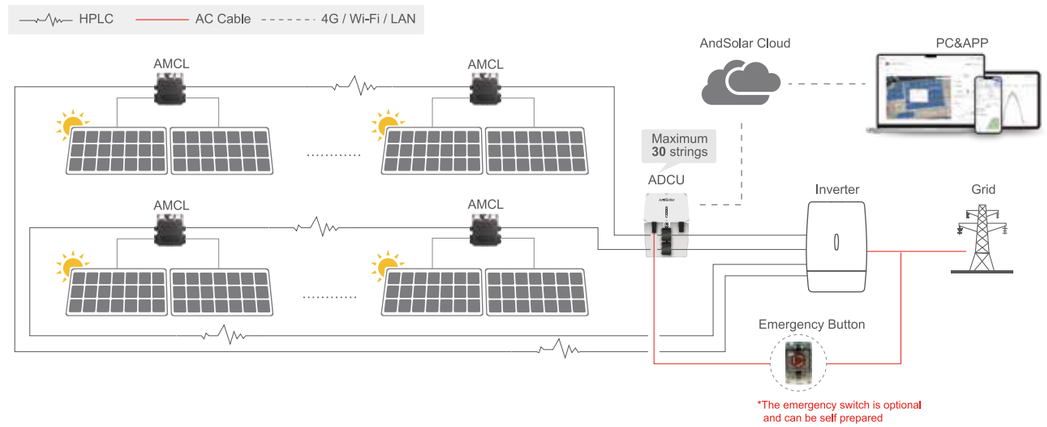
AMCL Series - Gen2

- Auto-shutdown to prevent safety issue
- 1V shutdown voltage to ensure DC side safety
- Module-level monitoring to easily locate faulty parts
- Communication distance: 800m to meet various application
- Rotatable installation with bolts and clip allowing full flexibility
- Firmware remote OTA upgrade to continuously improve user experience

AndSolar

Model	AMCL-D2	AMCL-E2	AMCL-F2
Input			
Voltage Range	8~80V Single-channel, 120V Dual-channel		
Maximum Input Current	15A	20A	25A
Maximum Short-Circuit Current	30A		
Output			
Voltage Range	8~120V		
Maximum System Voltage	600/1000/1500V		
Maximum Output Current	15A	20A	25A
Maximum Voltage in Disconnect State	1V		
Structure Parameters			
Dimensions (W*D*H)	103*23*105mm		
Input/Output Connectors	MC4/Compatible with MC4/Customizable		
Input Cable Length	0.3m, 0.6m/0.6,1.5m/Customizable		
Output Cable Length	1.4m/Customizable		
Ingress Protection Rating	IP68/Tpye 6P		
Flame Retardant Grade	UL94 5VA		
Environment Parameters			
Temperature Range	-40℃~+85℃		
Relative Humidity Range	0~100%		
Other			
Communication Method	HPLC		
User Interface	WEB+APP		
Certification			
Safety	NEC 2017&2020(690.12), UL 1741, CSA C22.2 No.330, UL 3741, IEC/EN 62109-1		
EMC	FCC Part15, IEC/EN 61000-6-1/-2/-3/-4		

System Topology



Smart Power Optimizer

AMCP Series

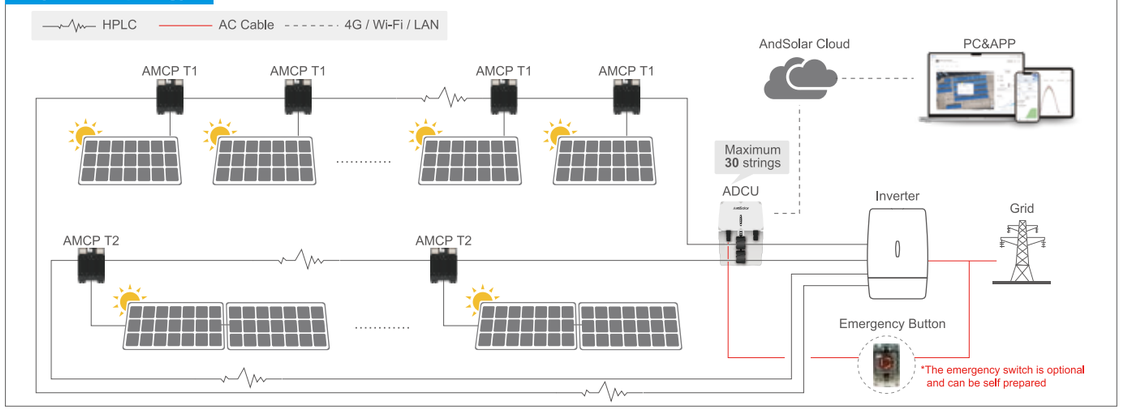
- Auto-shutdown to prevent safety issue
- Module-level optimization improves system power generation efficiency
- Module-level monitoring to monitor the real-time status of each module
- Smart operation and maintenance reduces power plant O&M costs
- Improve system design flexibility and optimize the usage of building area
- Rotatable installation with bolts and clip allowing full flexibility

AndSolar

Model	AMCP500-600T1	AMCP600-750T1	AMCP1000-1200	AMCP1200-1500
	T1 Series		T2 Series	
Input				
Rated Power	600W	750W	1200W	1500W
Maximum Input Power	650W	900W	1300W	1800W
MPPT Voltage Range	12~80V		24~130V	
Maximum Input Current	16A	22A	16A	22A
Overvoltage Level	II			
Output				
Voltage Range	0~80V		0~130V	
Maximum Output Current	16A	22A	16A	22A
Maximum Voltage in Disconnected State	1V			
Maximum System Voltage	1500V			
Efficiency				
Maximum Efficiency	99.60%			
Weighted Efficiency	99.00%			
Structure Parameters				
Dimensions (W*D*H)	120*33*155mm		120*49*155mm	
Input/Output Connectors	MC4/Compatible with MC4/Customizable			
Input Cable Length	0.6m/1.2m/Customizable		1.4m/Customizable	
Output Cable Length	0.75m/Customizable		0.3m(+), 2.7m(-)/Customizable	
Ingress Protection Rating	IP68			
Environment Parameters				
Temperature Range*	-40℃~+85℃			
Relative Humidity Range	0~100%			
Highest Altitude	4000m			
Other				
Communication Method	HPLC			
User Interface	WEB+APP			
Certification				
Safety	IEC 62109-1, EN 62109-1, NEC 2017&2020(690.12)			
EMC	IEC/EN 61000-6-1/-2/-3/-4			

*When the operating temperature exceeds 70°C, the device may work in de-rating mode and return to normal operating mode after the operating temperature decreases;

System Topology



Gateway

ADCU Series

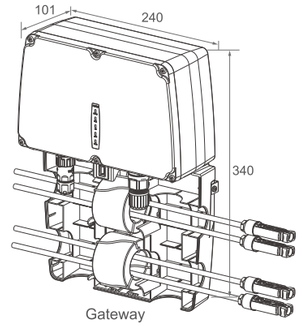
- Support up to 30 PV strings and up to 600 PV modules
- Innovative compartment design, eliminating the needs to punch holes or cut wires, effortless installation
- Excellent product design, makes 30% smaller than Gen-1 and enables ingress rating of IP65
- Support 4G, LAN, Wi-Fi communication methods
- Equipped with a power switch for easier on-site O&M
- Support AMCL-Gen2 series and AMCP series in one PV system

AndSolar

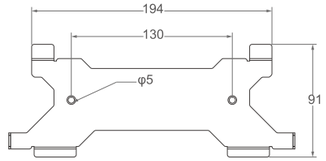
Model	ADCU-M0	
Input		
Input Voltage	85~264V	
Operating Power	2W	
Maximum MPPT String Voltage	1500V	
Max. No. of Modules in Series	30	
Magnetic Ring		
Number of Magnetic Rings	1	2
Max. Input Strings	10	30
Max. PV Module Input	200(*Specific device)	600(*Specific device)
Thickness	23mm	46mm
Inner Dimension/Outer Dimension	38mm/63mm	
Maximum Current of Single Magnetic Ring	500A	
Outdoor Box Specifications		
Dimensions (W*D*H)	240*101*340mm	
Temperature	-40℃~+85℃	
Ingress Protection Level	IP65	
Communication		
Device Communication	HPLC	
Cloud Communication	4G/LAN/Wi-Fi	
Certification		
Safety	NEC 2017&2020(690.12), UL 1741, CSA C22.2 No.330, UL 3741, IEC/EN 62109-1	
EMC	FCC Part15, IEC/EN 61000-6-1/-2/-3/-4	

*Specific device: 1-to-2 devices can input at most 600 modules (e.g., smart module-level rapid shutdown device)

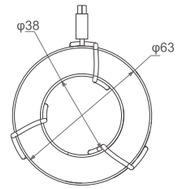
Unit: mm



Gateway

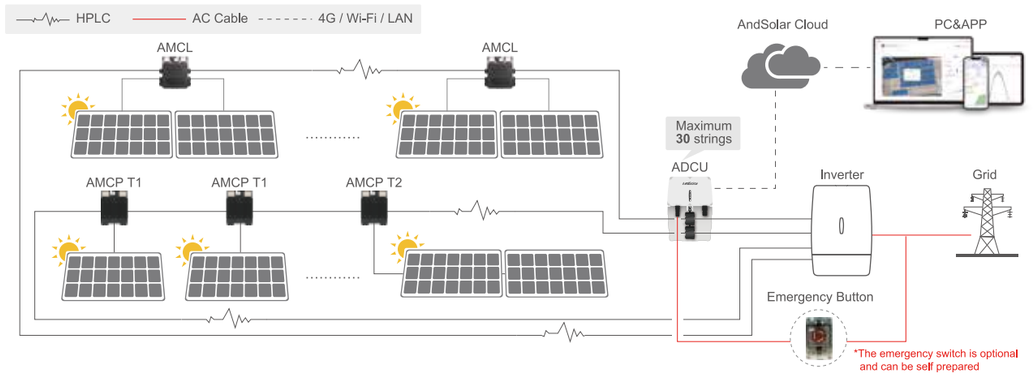


Mounting Bracket



Magnetic Ring

System Topology



Smart DC Module

ASSM Series

- Integrated with smart RSD, more function but less cost
- Auto-shutdown to prevent safety issue
- 1V shutdown voltage to ensure DC side safety
- Module-level monitoring to easily locate faulty modules
- Module-level management to shutdown the faulty module or string
- Communication distance: 800m to meet various application

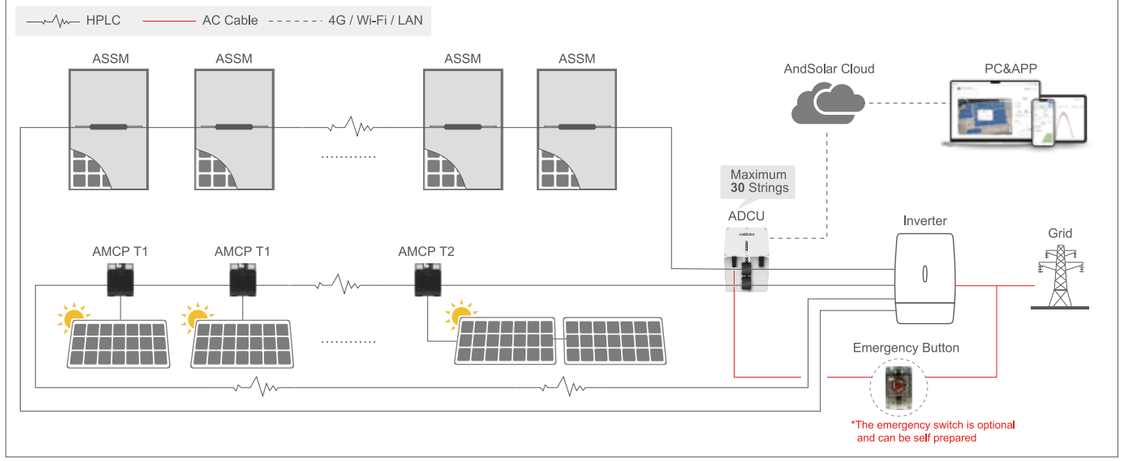
*The Smart DC Module will be released in Q4 2025

AndSolar

Model	ASSM450-460-N54DGS			ASSM620-630-N66DGS		
Mechanical Characteristics						
Cell Type	N- type Mono-crystalline					
No. of Cells	108(54×2)			132(66×2)		
Dimensions	1762×1134×30mm			2382×1134×30mm		
Weight	22.5kg			32.5kg		
Front Glass/Back Glass	1.6mm / 1.6mm			2.0mm / 2.0mm		
Junction Box	AndSolar Smart Box					
Protection Class	Class II					
IEC Fire Type	Class C					
Connector Type	MC4/Compatible with MC4/Customizable					
Output Cables(Including Connector)	(+): 400mm, (-): 300mm/Customized Length					
Ingress Protection Rating	IP68/Tpye 6P					
Flame Retardant Grade	UL94 5VA					
Specifications (STC)						
Maximum Power - Pmax [Wp]	450	455	460	620	625	630
Maximum Power Voltage - Vmp [V]	32.82	33.00	33.17	40.72	40.88	41.02
Maximum Power Current - Imp [A]	13.71	13.79	13.87	15.22	15.29	15.36
Open-circuit Voltage - Voc [V]	39.30	39.50	39.70	49.08	49.28	49.48
Short-circuit Current - Isc [A]	14.48	14.56	14.64	16.08	16.14	16.20
Module Efficiency STC [%]	22.52	22.77	23.02	22.95	23.14	23.32
Power Tolerance	0~+3%					
Temperature Coefficients of Pmax	-0.29%/℃					
Temperature Coefficients of Voc	-0.25%/℃					
Temperature Coefficients of Isc	0.045%/℃					
Operating Voltage Range	8~60V					
Maximum Voltage in Disconnect State	1V					
Application Conditions						
Operating Temperature	-40°C~+85°C					
Relative Humidity Range	0~100%					
Maximum System Voltage	1500V(IEC)					
Maximum Series Fuse Rating	30A					
Other						
Communication Method	HPLC					
User Interface	WEB+APP					

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

System Topology



Smart Inverter

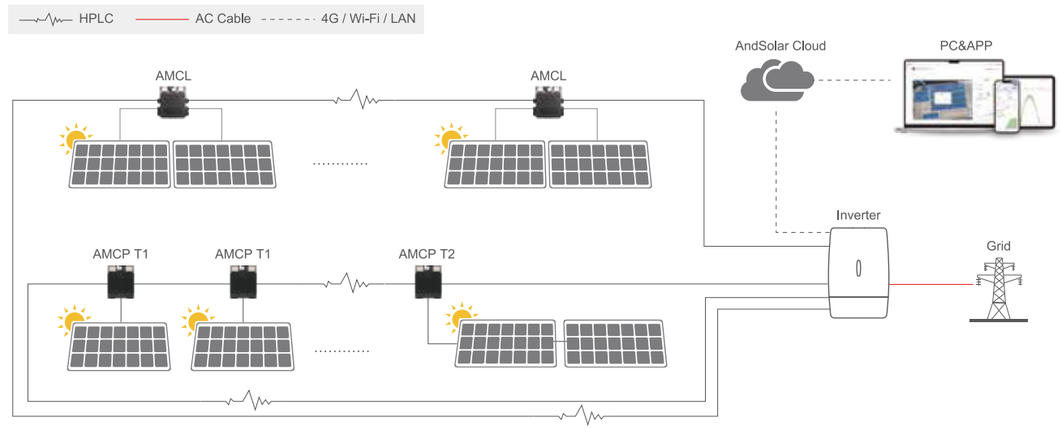
AECU Series

- High conversion efficiency improves system power generation capacity
- To be paired with AndSolar optimizer to maximize system power generation efficiency
- AFCI DC arc fault detection to ensure the safety of power plant
- Multi-dimensional IV diagnosis and intelligent perception of system problems
- System-level solutions, collaborative management, efficient and reliable
- Improve PV power plant O&M efficiency and reduce O&M costs

AndSolar

Model	AECU-A1	AECU-B3
Output		
Rated Output Power	10kW	33kW
Rated Output Voltage	220/230V	380/220V; 400/230V
Maximum Output Current	48A	50A
Grid Type	Single Phase	Three Phase 3W+PE; 3W+N+PE
Rated Frequency	50/60Hz	
Power Factor	-0.8~0.8	
THDi	< 3%	
Input		
Maximum Input Voltage	480V	1000V
Maximum Input Current	25.5A	43.5A
Mechanical		
Dimensions (W*D*H)	350*170*350 mm	350*200*550 mm
Input Connectors	MC4/Compatible with MC4	
Temperature Range	-40~+60℃	
Ingress Protection Rating	IP65	
Other		
Communication Modes	RS485; Wi-Fi; 4G(Optional)	
Maximum Efficiency	98.5%	98.9%
Weighted Efficiency	98.0%	98.5%
Certification		
Safety	IEC/EN 62109-1/-2	
EMC	FCC Part15, IEC/EN 61000-6-1/-2/-3/-4	

System Topology



Service and Support

Full life cycle reliable service and professional support

Professional pre-sales

- Sales+Engineer 2V1 pre-sales consultation, answering technical questions about power plant installation
- Accurate and fast assessment, providing a demand list based on the customer's installed capacity

Installation support

- Global projects with on-site installation guidance and trouble-shooting
- Engineers assist in construction to ensure the precise management of power plant

Worry-free after-sales service

- Continuous OTA updates of product functions to keep investment rising
- 24/7 real-time service response to efficiently solve customer problems
- All products have been insured by Ping An Insurance

Professional training

- Professional engineers provide regular training to explain the key points of power plants
- Integrate training forms with online, offline, and simulated operations

Project Cases

• International Amusement Park PV project in Shanghai, China

• MG Stationery PV Project in Shanghai, China

• SANY PV Project in Hunan, China

• Jotun Carport PV Project in Jiangsu, China

• Tianheng Flax PV Project in Heilongjiang, China

• Xiangzhong Ceramics Mall in Hunan, China

• 3E Industrial Complex PV Project in Jiangsu, China

• Subdistrict Office PV Project in Shanghai, China

• Tieta Base Station PV Project in Jiangxi, China

• North Hi-Tech Park PV Project in Shanghai, China

• Fudi Villa PV Project in Shanghai, China

- KMITL University PV Project in Bangkok, Thailand

- Global Plaza Mall PV Project in Pampanga, Philippines

- Rubber Factory PV Project in Krabi, Thailand

- TC Town PV Project in Rayong, Thailand

- Plastic Factory PV Project in Manila, Philippines

- Villa PV Project in Sydney, Australia

- Hotel PV Project in Phuket, Thailand

- Capella Resort PV Project in Singapore

- Tool Factory PV Project in Rayong, Thailand

- Dispaly Center PV Project in Sydney, Australia