AndSolar

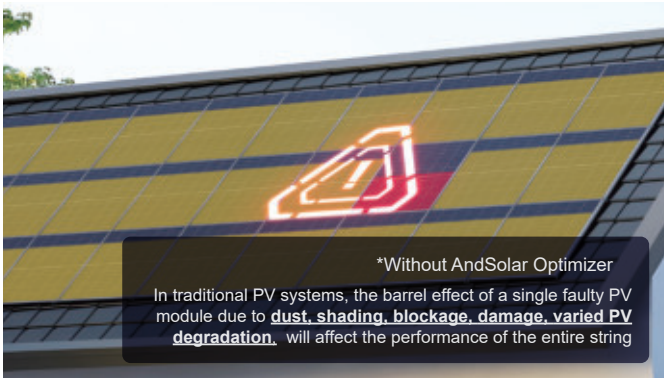
AMCP

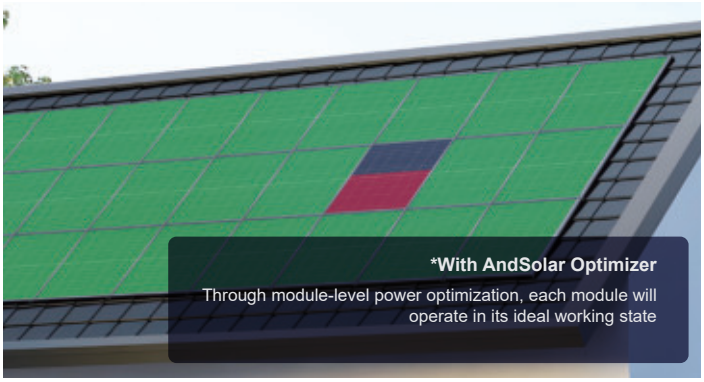
Smart PV Optimizer

Optimization | Flexible Design | Smart Monitoring | Multi-layer Protection | Quick Installation

Optimization

Resolving system mismatch issue, increasing power generation by **5-30%**

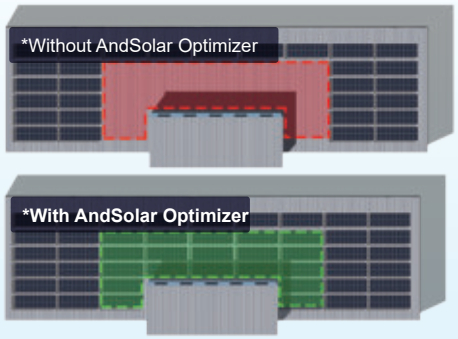




Flexible Design

More installed PV modules equal to higher power generation, flexible system design

Flexible system design



Allowing installation of up to **25%** more PV modules

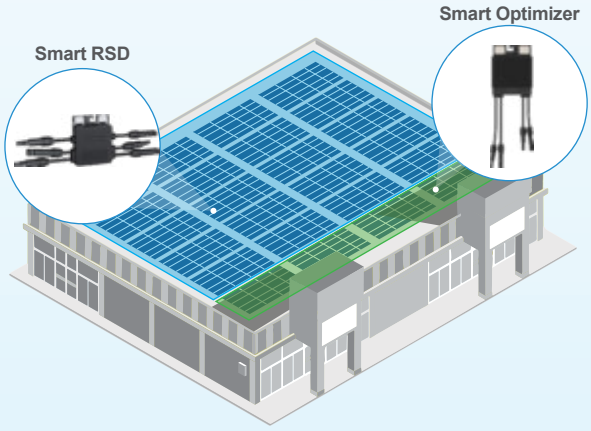
Oversized string design

Increasing the quantity of PV modules in a string up to **25%** , reducing system installation cost

Mixed installation

Save Cost

50%+

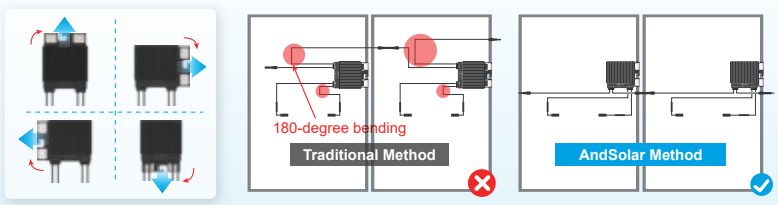


Allow mixed installation of RSD and power optimizers, reduces the investment cost and improves the ROI of your power plant

Quick Installation

Innovative design, and installation can be completed within **30S**

Rotatable installation design



The first four-way rotatable installation design, saving wires and avoiding 180-degree bending

Installation methods

Bolt installation

Clip installation

Smart Monitoring

Comprehensive understanding of every PV module

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

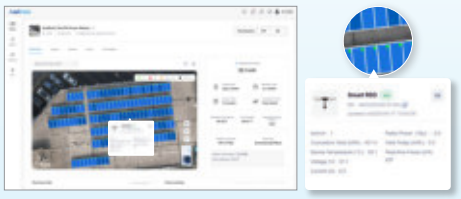
2~3 times/quarter

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

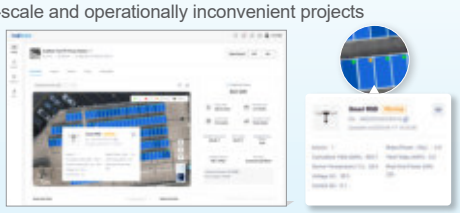
4+ hours

VS

Remote troubleshooting

AndSolar Cloud→Warning List→Plant Details→Fault Location
More 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

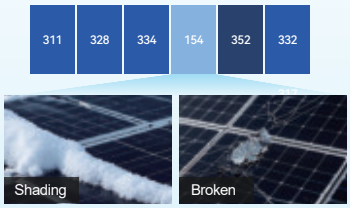
Reduce power plant revenue

VS

Module-level management

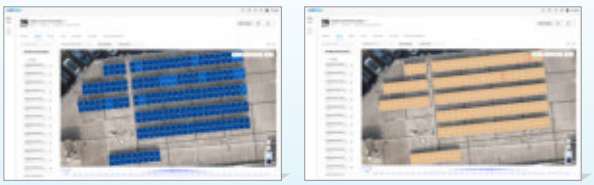
The faulty modules can be shutdown in time to improve the power generation efficiency, and the power plant problems can be solved together to save O&M costs

Improve power plant revenue



Precise Module-level monitoring around 24/7

- **Data playback and locate problems**



Replay daily operating data to identify potential problems in power plants

- **Maximize ROI with AI integrated**

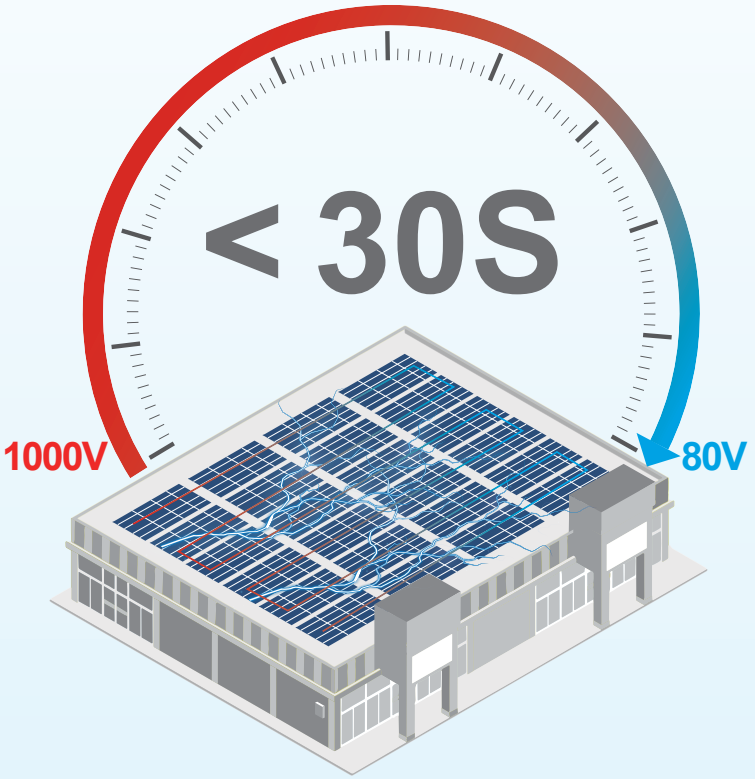
*AndSolar AI will be available in Q4 2025

Precise module-level management powered by AI, ensure the profit of your power plant

Multi-layer Protection

Protect the safety of the power plant

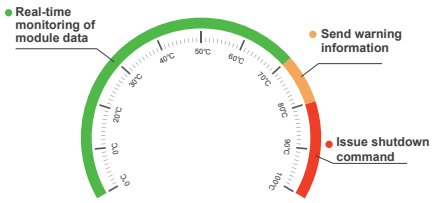
Module-level RSD



Decrease to safe voltage within **30S**
compliance to **NEC 2017&2020(690.12)** regulation

Active and passive safety strategy

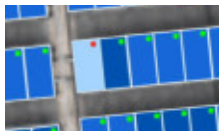
High Temperature Auto Shutdown



Cloud Platform Response

Cloud Platform Remote Shutdown

Shutdown the power plant



Shutdown one module

On-site Manual Shutdown

Respond to emergencies immediately to ensure safety

Product Features

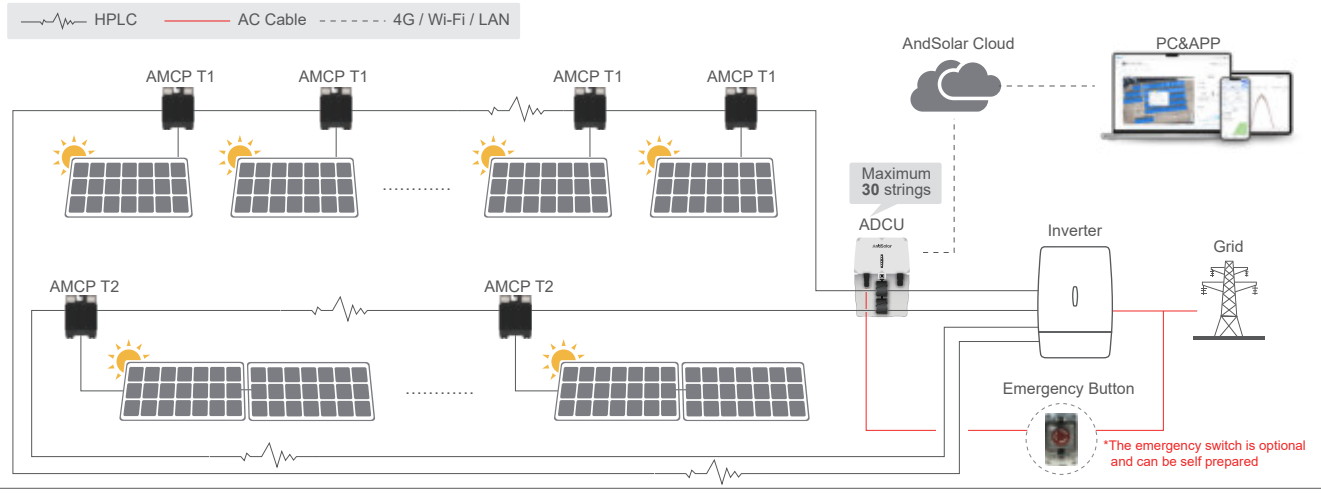
	Features	AndSolar Smart Optimizer	Other Brands Optimizer
Specifications	Compatible PV Power	500~900W	650W
	Maximum Rated Current	22A	20A
	Max. Efficiency	99.6%	99.5%
	Overload Capacity	1.1~1.2X	1X
	Max. Communication Distance	800m	300m
Basic Features	Module-level Power Optimization（MPPT）	√	√
	Module-level Rapid Shutdown	√	×
	Oversized String Design	√	×
	Fault Warning	√	×
Smart Features	Module-level Data Monitoring	√	×
	Graphic Data Display	√	×
	Output Curve and Comparison	√	×
	Module-level Physical Positioning	√	×
	Early Warning Active Protection	√	×
	Digital Work Orders	√	×
	Fault Analysis	√	×
	O&M Strategy Analysis	√	×
	System Loss Analysis	√	×
	Full Life Cycle Asset Management	√	×
	Remote Upgrade（OTA）	√	×

Product Parameters

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



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