AndSolar

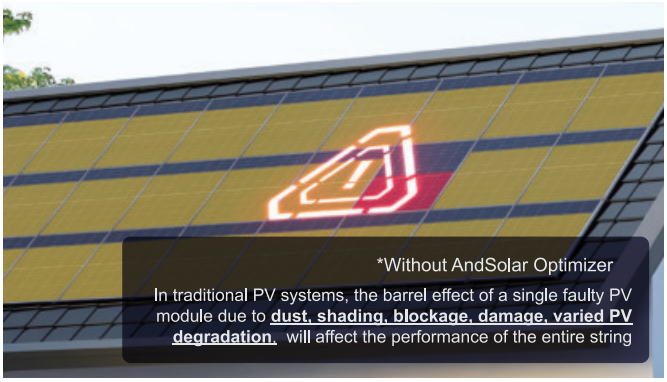
AMCP

Smart PV Optimizer

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

Optimization

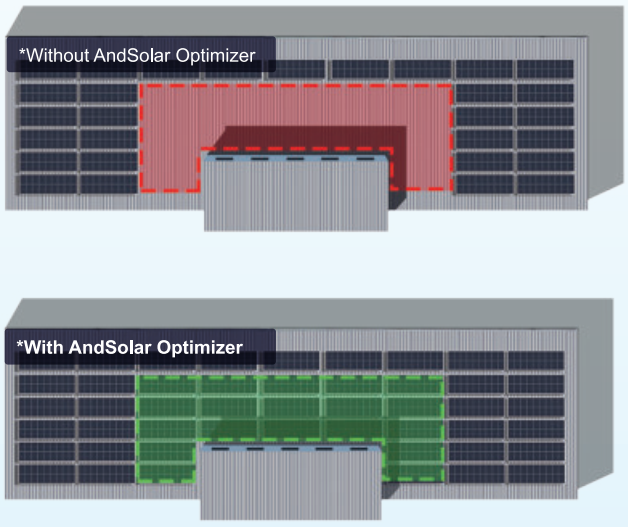
Resolving system mismatch issue, increasing power generation by **5-30%**



Flexible Design

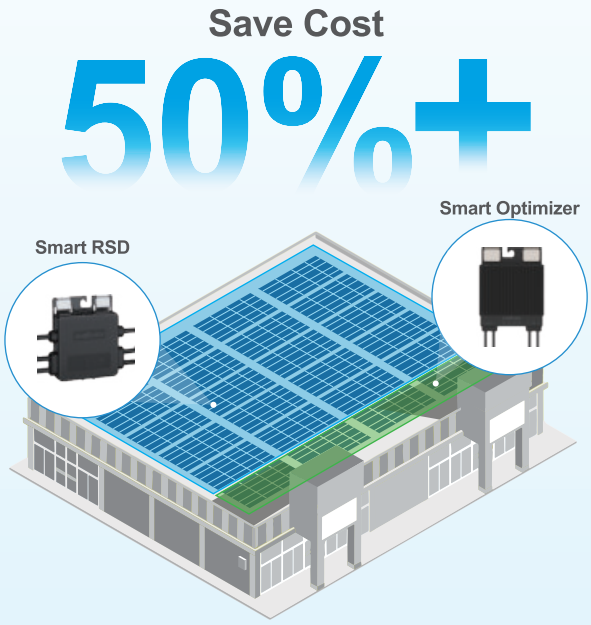
More installed PV modules equal to higher power generation, flexible system design

Flexible system design



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

Hybrid installation

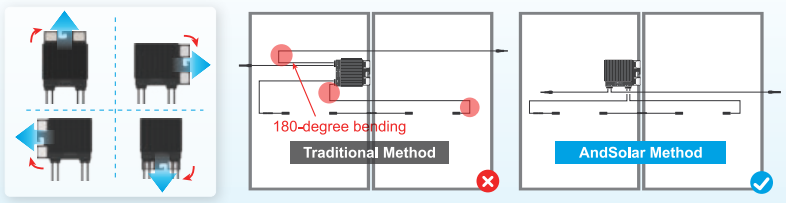


Allow hybrid installation of smart rapid shutdown devices and smart pv optimizers, reduces the investment cost and improves the ROI of your power plant

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

AndCloud 3.0 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

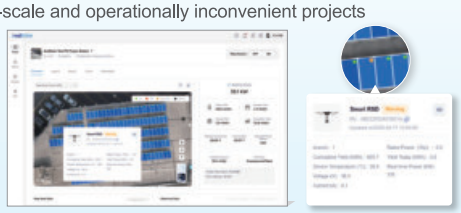
4+ hours

VS

Remote troubleshooting

AndCloud 3.0→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**

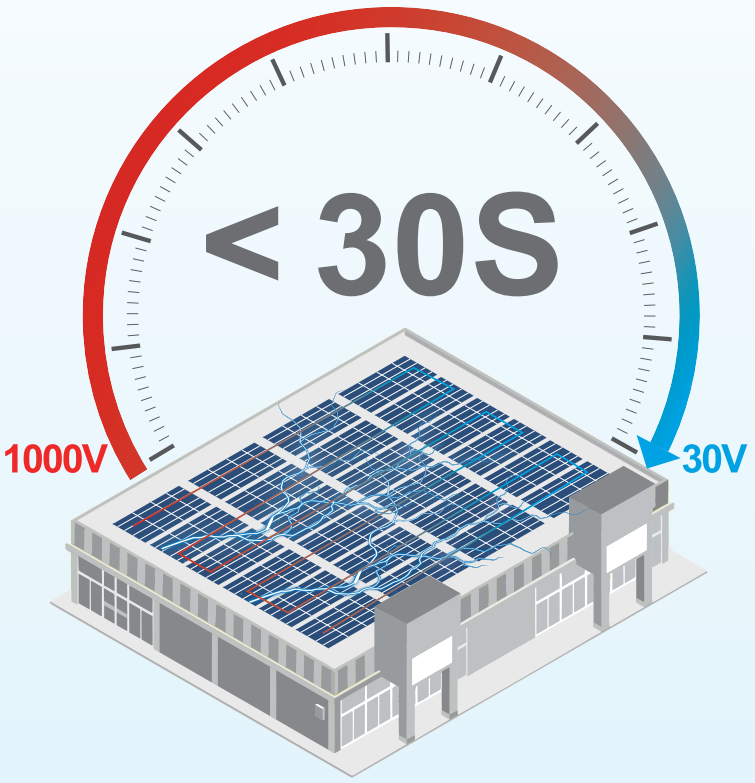
*Launching in H2 2026

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

Multi-layer Protection

Protect the safety of the power plant

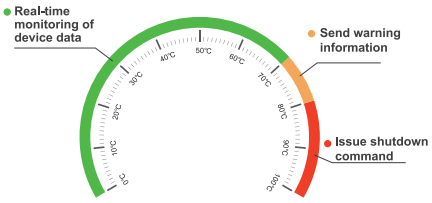
Module-level RSD



Decrease to safe voltage within **30S**
compliance to **NEC 2017/2020/2023(690.12)** regulation

Active and passive safety strategy

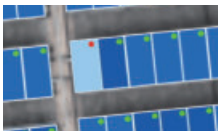
High Temperature Auto Shutdown



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

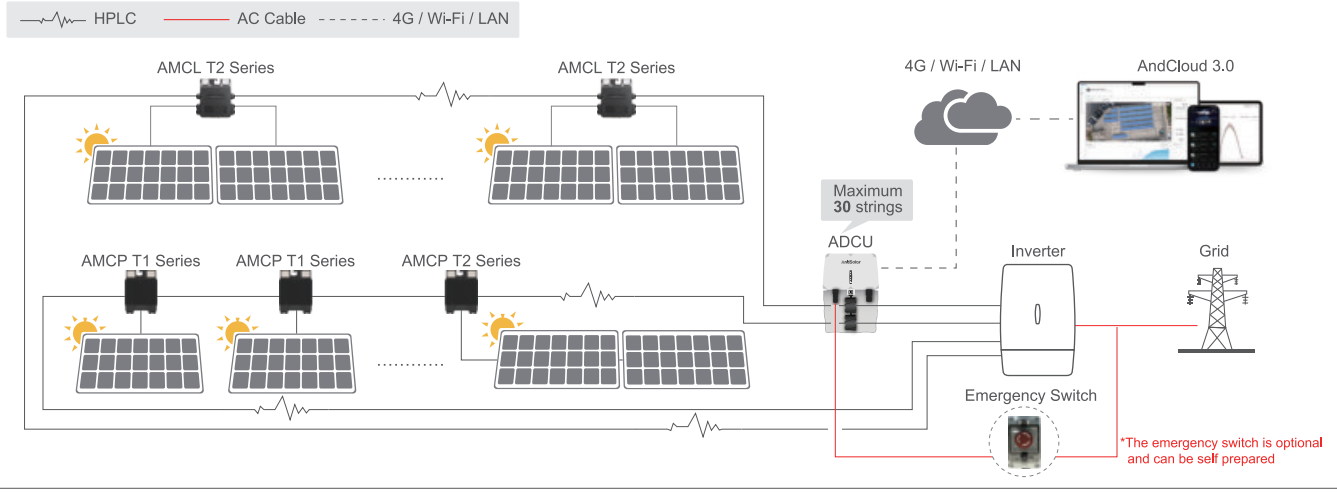
Features		AndSolar Smart Optimizer		Other Brands Optimizer	
		T1 Series	T2 Series	T1 Series	T2 Series
Specifications	Compatible PV Power	900W	1800W	750W	1500W
	Maximum Rated Current	22A		20A	
	Max. Efficiency	99.6%		99.5%	
	Max. Communication Distance	800m		300m	
Basic Features	Module-level Power Optimization (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

	T1 Series		T2 Series	
Model	AMCP500-600T1	AMCP600-750T1	AMCP1000-1200	AMCP1200-1500
Input				
Rated Power	600W	750W	1200W	1500W
Maximum Input Power	650W	900W	1300W	1800W
MPPT Voltage Range	12-80V		24-130V	
Maximum Input Current	15A	22A	16A	22A
Overvoltage Level	II			
Output				
Voltage Range	0-80V		0-130V	
Maximum Output Current	15A	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	0.7m(+), 1.4m(-)/Customizable		1.4m(+/-)/Customizable	
Output Cable Length	0.3m(+), 1.3m(-)/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/EN 62109-1, NEC 2017/2020/2023(690.12)		IEC/EN 62109-1, NEC 2017/2020/2023(690.12), UL3741	
EMC	IEC/EN 61000-6-1/-2/-3/-4		FCC part 15, IEC/EN 61000-6-1/-2/-3/-4	
Environmental protection	RoSH, REACH			

*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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AndSolar

AndSolar Technology Co., Ltd.

8F, Block B, Building 1, 286 Qinglonggang Road,
Suzhou City, Jiangsu Province, P. R. China

☎ +86-512-8718 7882

www.andsolartech.com

sales@andsolartech.com

Facebook Linkedin YouTube Instagram

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