



A Breakthrough in PV Adjustable Rack — "1+1" Adjustable Rack

Model: HY-AR

Patent No: ZL2013205449520

New designed "1 + 1" Adjustable Rack install dedicated angle adjustable support(CAS660) on every post and link multiple dedicated angle adjustable supports(CAS660) through multiple universal joint function link rods to realize multi-point supporting, one person can be synchronous regulating 1-2 PV strings. It is the most advanced PV mounting system. The actual data show that HY-AR could increase the power output up to 10%.

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ONE person use ONE minute to adjust ONE unit (11KWp : 256Wp of 44 modules). ONE person use ONE day to adjust 1-2MWp (100-200 units). Worker also can use electric screwdriver and special angle adjuster (AA9) to adjust angle. Adjustment cost is extremely low.

Identical structure design to the fixed Rack with Less Weight and Better Safety

"1+1" Adjustable Rack mechanism design is very similar to traditional fixed bracket structure, which is frame type structure design, the structural strength is same to that of the fixed rack with the same weight. Also it can fully leverage the supply chain of the fixed rack, such as raw materials, processing technology and manufacture equipment, fast throughput and low cost.

Flexible linkage design with low foundation accuracy requirement

"1+1" Adjustable Rack is adopted easy installation design, using a long round hole and universal joint to link parts, greatly improving the flexibility of installation; it can solve the installation problem due to foundation precision and ensure easy angle adjustment.

More reliable against typhoon and avoid accumulated snow

During typhoon season, the "1+1" Adjustable Rack is placed at the horizontal position, which is more reliable against typhoon; During snowing season, the "1+1" Adjustable Rack is placed at 60° angle, which could avoid accumulated snow, give structure better strength and increase sunlight utilization hours, improve solar farm's output.

Advanced technology Reliable quality Low LCOE High ROI



“1+1” Adjustable Rack

Typical 72-cell c-Si configuration: 1X18 Landscape



HY-AR TECHNICAL SPECIFICATION

Product Model	HY-AR
Surface Area	Up to 88m ²
Adjusting accuracy	±2.0°
Installed solar panel type	250W—350Wp
Number of modules per string	Up to 44 modules
Adjusting angle range	0°—60°
Maximum working wind speed	25m/s
The maximum wind speed	42m/s
The power output increasing	Up to 10%
Module Arrangement	Portrait and Landscape
Life time	>25years
Steel parts surface treatment	Hot dip galvanized
The number of person to adjust one unit	1 person
Time to adjust one set	1 minute
Man hour of adjusting angle/MWp/once	8 hours for one person
Adjusting method	Manual or Electric screwdriver
Adjusting tool	Handle, Recliner, Electric Screwdriver
Adjusting torque	<10N.m
Qualifications	ISO9001
Foundation Type	Strip foundation, Filling pile, Screw Pile
Certification	Wind Tunnel Testing
Warranty	5 years;

