Ground mounted solar power unit



Dual Panel Tracker | Performance made simple!

The dual panel post mounted tracker offers unparalleled simplicity to install a high performance, grid tied, solar electric system. The tracking mount provides as much as a 30% gain over a fixed tilt installation and it can be installed on a simple wooden post. The tracking mount is a powder coated steel construction outfitted with two 235 watt solar panels. The mount rotates the panels about an equatorial axis using an automotive grade actuator to track the sun and provide years of trouble free performance.

A small GPS enabled controller makes calibration and initialization a breeze. Simply install the mount facing south and the controller will take care of the rest. The GPS unit will determine its location and provide the time and date to accurately and actively position the panels to face the sun from sunrise to sunset for a maximum daily power harvest.

An on-board micro-inverter converts the DC power generated by the panels to "Grid Ready" AC power. Multiple trackers can be daisy-chained together to configure larger systems. Power is run back to the house with a buried cable. The electrical integration with the utility grid at the panel is straight forward and can be performed by a variety of electrical contractors.





Electrical Characteristics

MOTECH 235 watt module (2 modules)

 Power
 2 @ 235W = 470 total

 Type of cell
 Polycrystalline silicon

 Max Power Voltage
 2 @ 30.7 V

 Max Power Current
 2 @ 7.7 A

Max Power Current 2
Grid Tie inverters (2 x EnPhase M215)

Voltage output to grid 208 or 240 VAC Static MPPT efficiency 99.6%
Peak inverter efficiency 96.3%

Suggested Installation Method

Wooden post mounting

8 ft - 6" x 6" treated wooden post

36" minimum depth hole
16" diameter concrete fill recommended

1/2" dia. thru Bolts

Electrical Integration with power distribution panel (consult local building and electrical codes)

Mechanical Characteristics

Dimensions (solar panel) 2 @ 65"h x 39.1"w x 1.97"d Dimensions (mount and frame total envelope)

Weight (installed with solar panel)

Cooling

Natural Convection

Mountino

Weight (installed with solar panel)

Natural Convection

Weight (installed with solar panel)

165 lb

Natural Convection

Weight (installed with solar panel)

(for wood posts, other fasteners available for steel poles)

Tracking Control system

Microprocessor-based true position sun tracking GPS enabled for automatic initialization

High accuracy tracking Fail-safe return to due South No batteries to replace

Efficient controller with low power consumption

Operating Conditions

High strength steel mount designed for max gust 90 MPH Temperature operating range -40C to +65C

Snow loading less than 12" on panels

System Performance

30+ % improvement in energy collection

+/- 60 degree collection sweep

Warranted against defects in material and workmanship

Mount mechanism, controller, motor - 5 yr limited warranty Grid-tied inverter - Manufacturer's warranty

Solar Panel - Manufacturer's warranty

System Reliability

Steel construction with powder coat surface treatment

High reliability sealed actuator

Steel gear transmission and bronze bushings

No scheduled maintenance required

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Energy Systems

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