

CONVERT-1P

SINGLE-AXIS SOLAR TRACKER | 1-IN-PORTRAIT



Easy to Install. Easy to Own.

The modular design and superior engineering of Valmont® Solar Convert-1P Trackers make them simple to install, easy to maintain and built for long-term performance.



Simple, Robust Table Structure Design | Short rows provide best-in-class terrain following and layout density while enabling a stiff structure that minimizes failures and decreases long-term costs.



Innovative, Hybrid Controller Architecture | The wireless controller utilizes existing DC infrastructure to enable backup capabilities instead of failure-prone batteries or the need for auxiliary modules.



Global Supply Chain, Highest Quality | With 85 manufacturing facilities on six continents, Valmont has the footprint and capability to ship the highest-quality product while offering unmatched price stability and availability.



International, Bankable Product Portfolio | The Convert-1P Single-Axis Solar Trackers have been deployed in 11 countries on four continents, generating nearly 3GW for leading customers, financiers and partners.



THE IDEAL SOLUTION FOR:
Distributed Generation Projects
Utility-Scale Projects

STRUCTURAL/MECHANIC FEATURES

Tracking Technology	Horizontal, balanced single-axis tracker with independently driven rows and backtracking
Maximum Tracking Error	± 2°
Rotation Angle	± 55 (Up to 60°)
Module Compatibility	Adaptable to all available PV modules types on market: Monofacial and Bifacial (thin film, framed and frameless)
Ground Cover Ratio	Fully configurable; typical range from 25% to 50%
Land Slope	Up to 7% N-S (extended options available); Unlimited E-W
Configurations	1 module in portrait

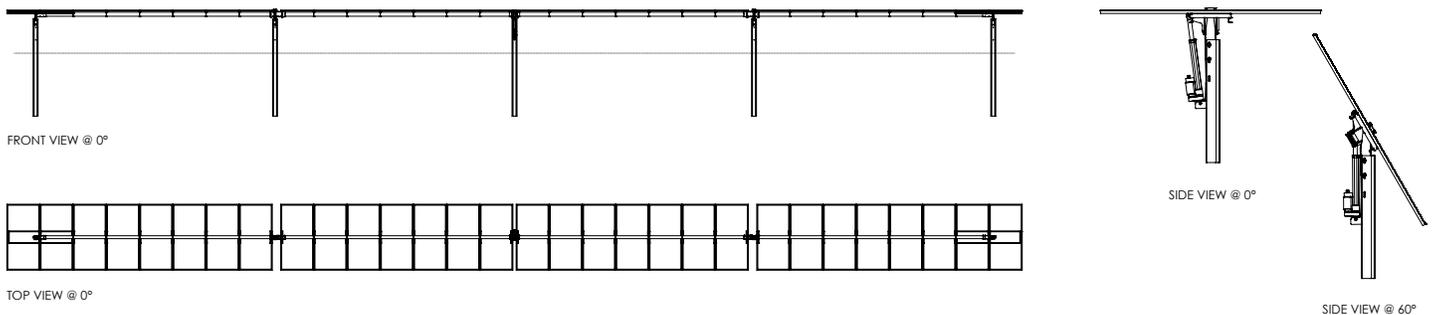
ELECTRONIC SPECIFICATIONS

Motor	Linear actuator with induction AC motor (lubrication free) with integrated encoder
System	Electronic control boards for multiple system architectures (two solutions 10 or 100 actuators in closed loop with encoder)
Power Supply	<ul style="list-style-type: none"> • AC power supply from auxiliary service • Self-powered from PV string (patented backup solution without batteries) • Smart power integration with string inverters
Operating Temperature Range	-20°/50° C (-4° F/122° F) extended range available
Solar Tracking Method	Astronomical clock with GPS input; self-configuring; no irradiation or tilt sensor required
Monitoring & Data Stream	Wireless or wired (RS485, Ethernet, Fiber)
Communication	Real-time local or remote communication data provided via Modbus

INSTALLATION

Foundation	Compatible with all foundation types (driven pile, ground screw, concrete)
Installation Method	Requires no specialized personnel or equipment; no in-field welding
Module Installation Method	Rivets, bolts or clamps
Grounding Method	Self-ground structure; no separate materials or labor
Warranty	10 years on structural components; 5 years on motors and electronic components (extended warranty available)

EXAMPLE OF: TYPICAL TRACKER TABLE WITH 56 MODULES



QUALIFICATIONS & CERTIFICATES:

UL 2703
UL 3707
ISO 9001

ISO 14001
ISO 45001
ISO 50001

