

PROGETTO DELLA CENTRALE SOLARE

"Energia del Panaro"

da 83,2 MWp - Finale Emilia (MO)

D13

PROGETTO DEFINITIVO

SCHEDA TECNICA TRACKER



Proponente

ENGIE FINALE EMILIA S.r.l.

Via Chiese, 72, 20126 Milano MI

Handwritten signature: Vincenzo



Progetto dell'inserimento paesaggistico e mitigazione

Coordinamento alla progettazione: Dott. Agr. Fabrizio Cembalo Sambiasi,
Arch. Alessandro Visalli, Arch. Riccardo Festa

Progettisti: Arch. Paola Ferraioli, Arch. Anna Manzo

Collaboratori: Dott. Carmine Perna, Dott. Agr. Giuseppe Maria Massa,
Dott. Agr. Francesco Palombo, Dott. Agr. Vincenzo Meola
Urb. Patrizia Ruggiero, Arch. Ilaria Garzillo, Marco Ghezzi

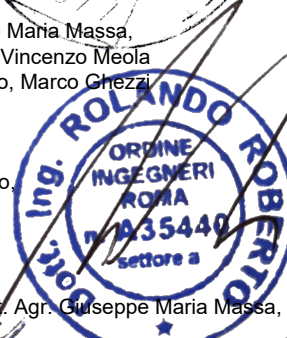


AEDES GROUP
ENGINEERING

Progettazione elettrica e civile

Progettisti: Ing. Rolando Roberto, Ing. Giselle Roberto

Collaboratori: Ing. Giuseppe Fava, Ing. Filippo Angarano,
Ing. Karim Ait Hamd, Ing. Marco Balzano,
Ing. Simone Bonacini



MARE
RINNOVABILI

Progettazione mandorleto superintensivo

Progettisti: Dott. Agr. Fabrizio Cembalo Sambiasi, Dott. Agr. Giuseppe Maria Massa,
Dott. Agr. Francesco Palombo

Consulenza geologica

Geol. Gaetano Ciccarelli

Consulenza archeologica

GeA Archeologia Preventiva

Consulenza agronomica

iGreen System, Imola



iGreen System
Evoluzione tecnologica per l'ambiente

08 ● 2025

rev	descrizione	formato	elaborazione	controllo	approvazione
00	Prima consegna				
01					
02					
03					
04					
05					
06					
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ADVANCED AGRI-PV

ADVANCED CONVERT AGRIVOLTAIC TRACKER



Elevating Agriculture. Empowering Energy.

Valmont® Solar Agri-PV Convert Tracker products enable farmers to harness the power of the sun to revolutionize agricultural practices – integrating crop production with sustainable, energy-producing ventures. Designed specifically to meet the evolving needs of the agricultural sector, Agri-PV solar tracking products represent the latest in a comprehensive range of solutions, trusted worldwide for their efficiency.



Proven Track Record | Trusted in 11 countries across four continents, the Valmont Solar Convert Tracker and Agri-PV series deliver consistent performance in diverse agricultural settings.



Smooth integration | Designed for easy installation and minimal maintenance, our modular approach ensures smooth integration and long-term reliability, optimizing agricultural.



Strategic Partnerships | Valmont Solar partners with private and public companies to ensure our products meet the expected requirements both for industrial requirements and plant growth. Our pilot and standing projects prove our commitment to continuous improvement and innovation.



Cutting-Edge Research | Our products benefit from extensive research and development (R&D), including wind tunnel and CFD analysis, ensuring optimal performance and minimal environmental impact.



Local Sustainability | The Valmont Solar Convert and Convert Agri-PV trackers are 100% made in EU, affirming our commitment to promoting local industry and environmental sustainability.



Advanced Control System | Our tracker SCADA (supervisory control and data acquisition) system, can be integrated with agricultural sensors, offering real-time monitoring and control, enhancing productivity and efficiency.

Customizable to Crop and Production Practices

Customizable configurations accommodate varying crop requirements, including Agri-PV Advanced – which includes Convert Agri-PV for medium-height fruit tree crops and Convert Agri-PV for higher tree heights including vineyards, kiwi trees and apple orchards.

STRUCTURAL/MECHANIC FEATURES

Tracking Technology	Horizontal, balanced single-axis tracker with independently driven rows and backtracking
Maximum Tracking Error	± 2°
Rotation Angle	± 50°
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%
Maximum Ground Clearance	2,1 m
Land Slope	Up to 7% N-S (extended options available); Unlimited E-W
Configurations	1 module in portrait

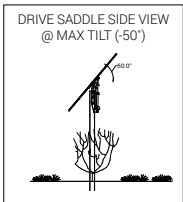
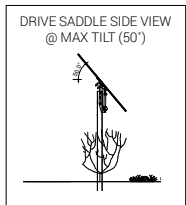
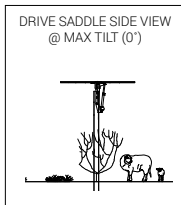
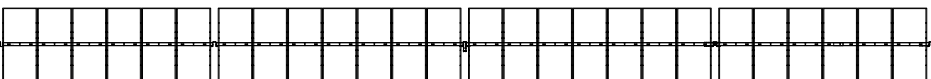
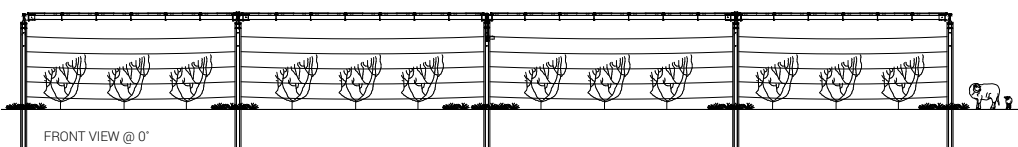
ELECTRONIC SPECIFICATIONS

Motor	Linear actuator with induction AC motor (maintenance free) with 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 • Optional: backup solution with centralized UPS • Optional: smart power supply directly from the string inverter
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 for the PV module grounding
Warranty	10 years on structural components; 5 years on motors and electronic components (extended warranty available)

EXAMPLE OF TYPICAL TRACKER TABLE WITH 26 MODULES



QUALIFICATIONS & CERTIFICATES:

UL 2703
UL 3707
ISO 9001

ISO 14001
ISO 45001
ISO 50001

