FS Metallica I

INTEGRATED TRACKER SOLUTION FOR COMPLEX AND DEMANDING CONDITIONS

FuturaSun® anticipate tomorrow

KEY BENEFITS AND FEATURES

- ±60° horizontal single-axis tracking for optimized energy yield
- ≤2° tracking accuracy with smart closed-loop tilt sensor control
- Low tilt stow angle for reduced wind exposure and improved reliability
- Lower installation time and full compatibility with cleaning robots
- High adaptability to complex terrain: N-S slopes up to 20%, unlimited E-W orientation
- Synchronous multi-point drive with reinforced transmission for higher structural stability

Structural Stability and Weather Resistance

FS Metallica ensures high stability across its full ±60° tracking range with a synchronous multi-point drive and reinforced structure. The low tilt horizontal stow position allows higher stow wind speed resistance, ensuring reliable operation even in coastal, high-wind, and seismic environments.

High Energy Yield and Smart Adaptability

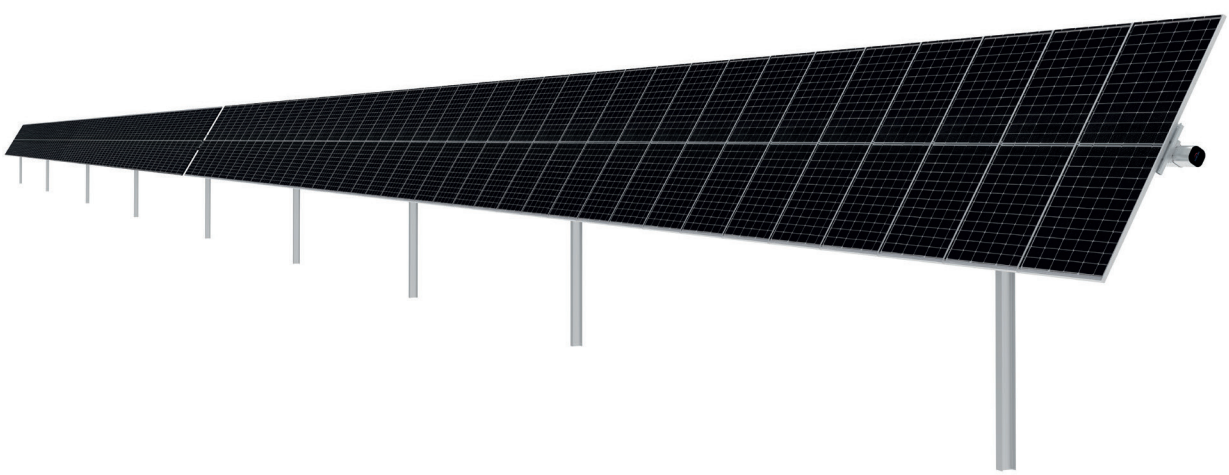
With advanced tracking algorithms and ≤2° accuracy, FS Metallica maximizes solar capture in all conditions. Its adaptable single-axis design supports complex terrains, while low energy consumption and reduced O&M needs increase overall plant performance and lifetime yield.

Tracker Specifications

Tracker Type	Independent horizontal single-axis tracker
Tracking Range	± 60°
Drive Type	Slew drive/Synchronomous multi-point design
Modules per Tracker	Up to 120 modules per tracker
System Voltage	1000 VDC - 1500 VDC
Foundation Options	Ramming piles/Cast-in-place concrete piles/Concrete piles or ballasts
Structure Material	Hot dipped galvanized steel/Pre-galvanized steel/Zn-Al-Mg coated steel
Daily energy Consumption	Typical 0.04 kWh
Standard Design Wind Speed	156 mph (70 m/s) per ASCE7-10, higher wind load available
Modules Supported	All commercially available modules
Operation Temperature Range	-30°C to 60°C

Tracker Controller Specifications

Control Algorithm	Astronomical algorithms & tilt sensor closed-loop control
Tracking Accuracy	≤ 2°
Backtracking	Support terrain adaptive intelligent algorithm
Communication Options	LoRa wireless/RS 485 cable/Bluetooth
Other Special Modes	Snow, flood and hail protection for customer selection
Controller's Power Supply	Default string power supply, AC / self-power as option
Flood Mode	Tracker flat (optional)
Snow Mode	Tracker at max tilt (optional)
Wind Stow Mode	Low tilt stow angle



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