

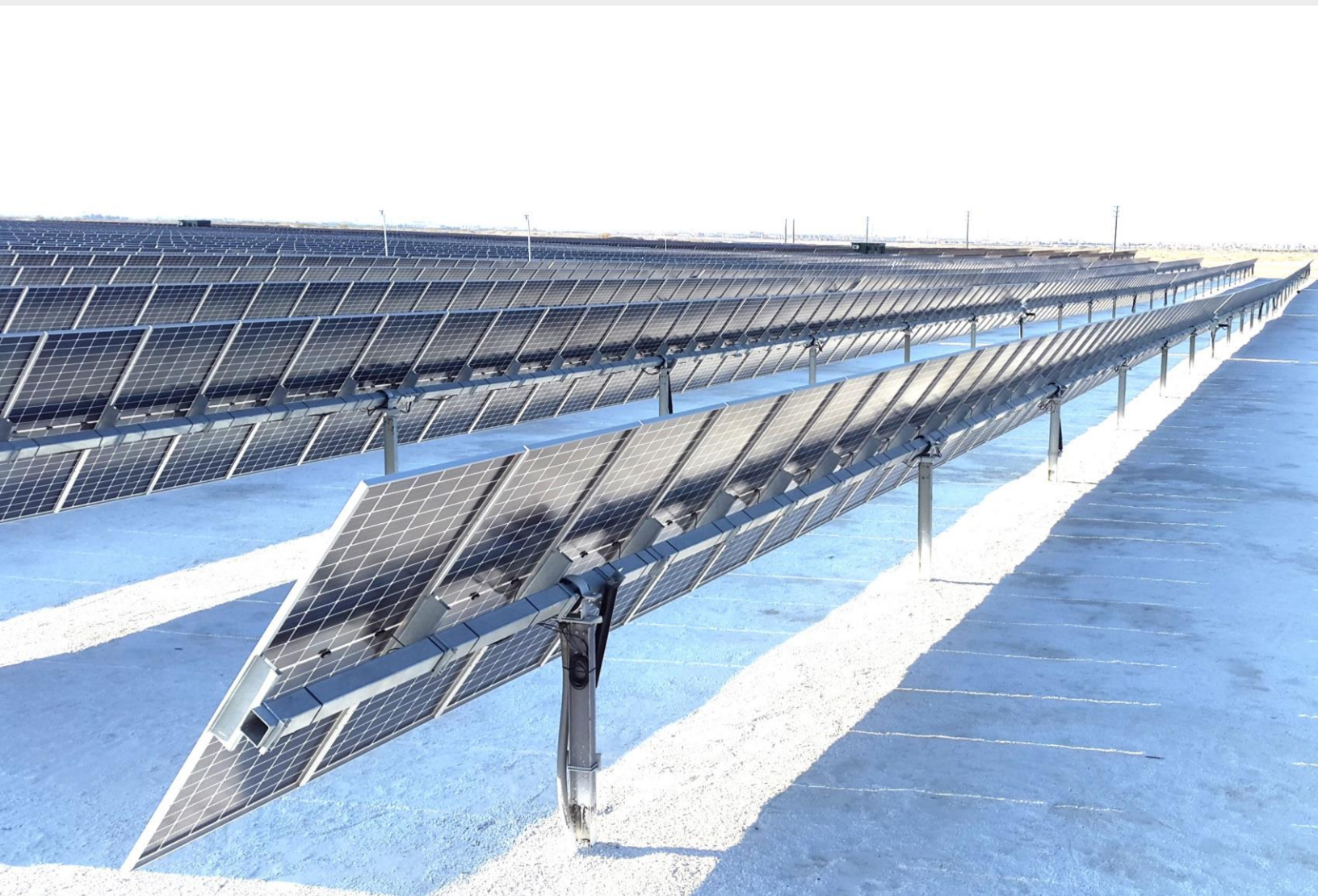


PowerMax Tracker Technical Specifications



General Specification

Tracker Type	Horizontal Single Axis Tracker (HSAT)	
Module Configuration	1P <input checked="" type="checkbox"/>	2P <input type="checkbox"/>
Rotation Angle	$\pm 50^\circ$ <input type="checkbox"/>	$\pm 60^\circ$ <input checked="" type="checkbox"/>
Row Configuration	Independent row <input checked="" type="checkbox"/>	Double row <input type="checkbox"/>
Driving Mechanism	Heavy duty slew gear <input checked="" type="checkbox"/>	Linear actuator <input type="checkbox"/>
Number of Drives per Tracker Line	Single Drive <input checked="" type="checkbox"/>	Multi Drives <input type="checkbox"/>
Drive Configuration	Independent <input checked="" type="checkbox"/>	Linked <input type="checkbox"/>
Rotation Control	Soft limit <input checked="" type="checkbox"/>	Hard limit <input checked="" type="checkbox"/>
Wind Protection System	Hydraulic energy absorber	
Cleaning Robot Compatibility	Fully compatible with MEGS cleaning robot	
Tracker Weight per MW	47 \pm 2 tons depending on the final detailed design	



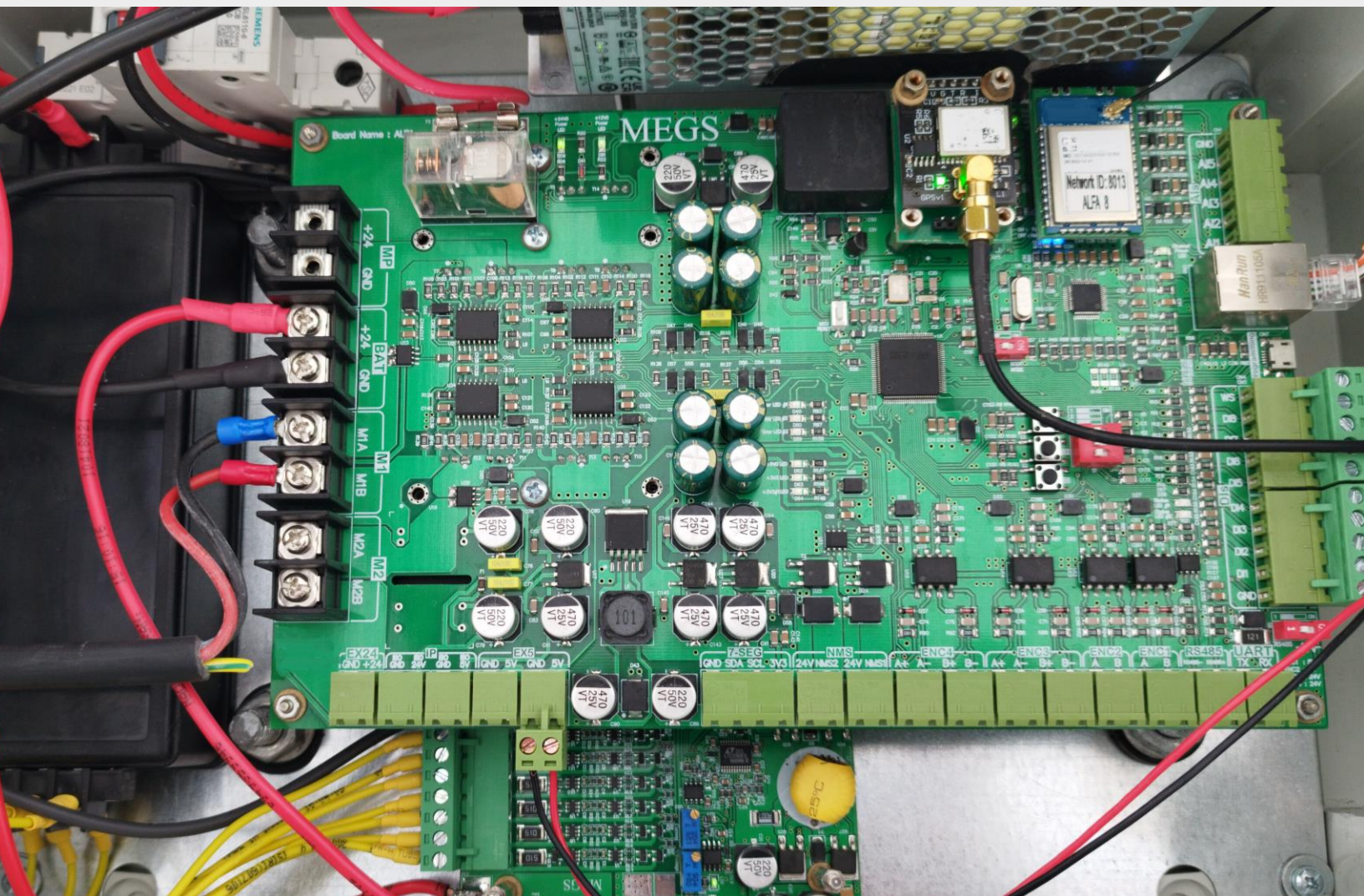
Structural Properties

Structural Code	ASCE 7-22
Shading Factor for Bifaciality Boost	Less than 10%
Wind Tunnel Analysis	Aeroelastic analysis
Ramming Optimization	POT analysis
Static Wind Protection Optimization	Computational fluid dynamics simulation
Bearing	Spherical
Flange	Full metal <input checked="" type="checkbox"/> Metal-Plastic <input type="checkbox"/> Plastic <input type="checkbox"/>
Pile & Other Structural Parts Coating	ASTM A123: 45-100Microns <input checked="" type="checkbox"/> Pregalvanized: 20Microns <input type="checkbox"/>
DUPLEX Coating on Pile	Anti-corrosive primer to be provided to install on-site as an option
Module Attachment on trackers	Direct bolted on 44 cm rail
Connection Type	Bolt <input checked="" type="checkbox"/> Rivet <input type="checkbox"/> Clamp <input type="checkbox"/>
Purlin Height	Low Rise <input type="checkbox"/> Mid Rise <input type="checkbox"/> High Rise <input checked="" type="checkbox"/>
Solar Cell Ground Clearance at Horizontal Position	~ 195 cm



Control System Properties

Positioning Algorithm	Standard <input type="checkbox"/>	Machine learning <input checked="" type="checkbox"/>
Backtracking Algorithm		3D <input checked="" type="checkbox"/>
Preventive Maintenance Function		Online health scan
Electromagnetic Compatibility		Yes <input checked="" type="checkbox"/>
Current Stabilizer	Soft stabilizer <input checked="" type="checkbox"/>	Hard stabilizer <input checked="" type="checkbox"/>
Filtering		High frequency noise
System Recovery	Soft reboot <input checked="" type="checkbox"/>	Hard reboot <input checked="" type="checkbox"/>
Nominal Rating		8 Amps
Heat Loss		Ultra-low
Operator Interface		MEGS local SCADA available as an option
MEGS SCADA Functions	Monitoring <input checked="" type="checkbox"/>	Controlling <input checked="" type="checkbox"/>



Communication System Properties

Network Nodes	Super Master, Master, Slave
Communication Type	CAN bus <input type="checkbox"/> Full wireless <input checked="" type="checkbox"/>
RF Platform	Zigbee
Up-Stream Frequency Band	900 MH/2.4 GH
Down-Stream Frequency Band	900 MH
Anti-Noise Immunity	Direct Sequence Spread Spectrum (DSSS)
Remote Monitoring & Controlling Protocol	Modbus TCP/IP
Routing	Auto-optimization configuration
Inter-Networks Communication Separation	Islanding based ID
Security Encryption	AES 128
Network Topology	Mesh
Intra-Network Communication Protocol	API



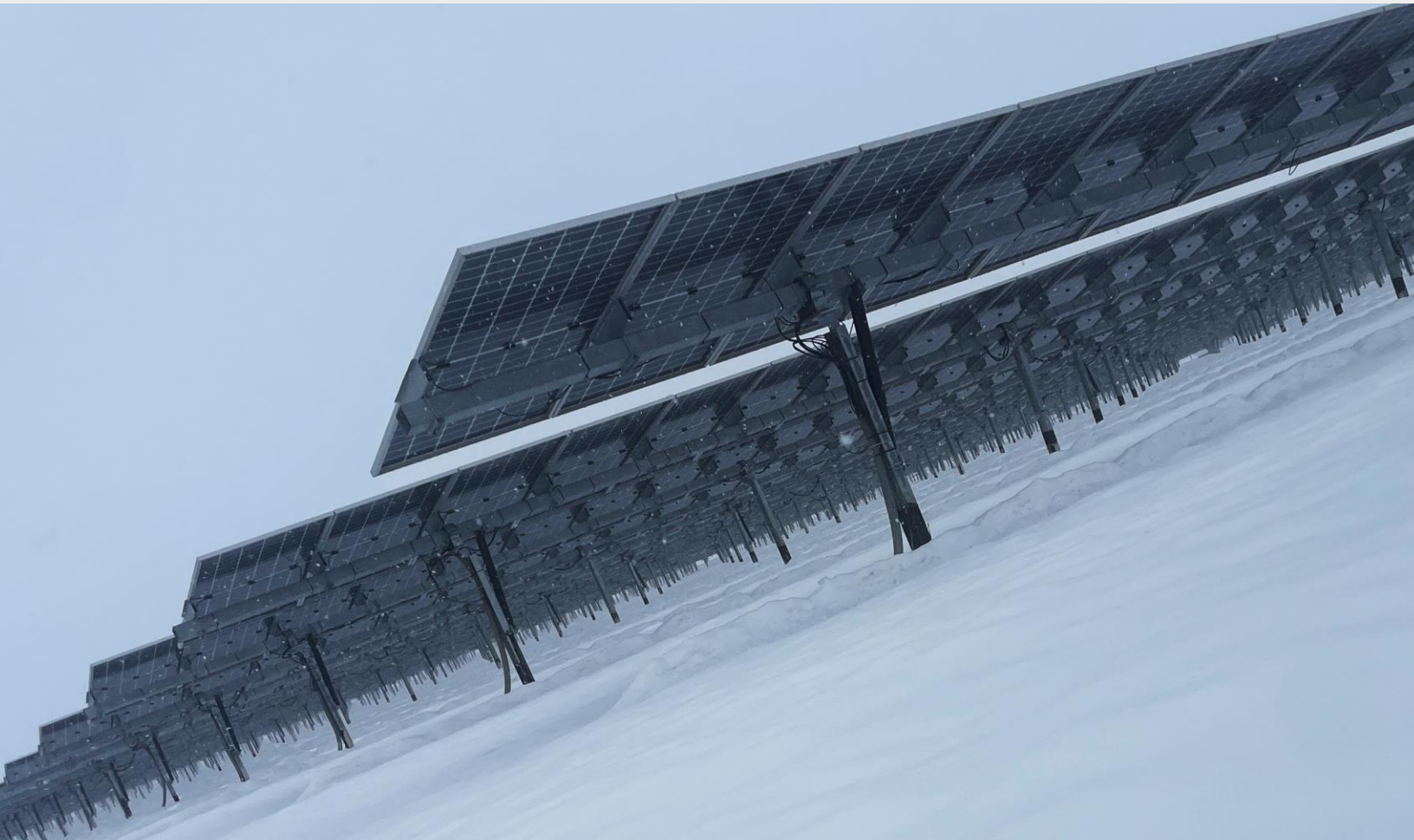
Environmental Conditions

Corrosion Level	C3 ■	C4□	C5□
Operating Ambient Humidity	20 to 90% RH		
Maximum Wind	140 km/h; 3-second gust at 10m height		
East-West Slope Tolerance	3% □		15% ■
North-South Slope Tolerance	2% □		15% ■
Operating Ambient Temperature	-25 to +50°C ■		-30 to +60°C □
Environmental Protection	IP65		
Operating Irradiance Level	100-1350 W/m2 □		0 - 1350 W/m2 ■



Control Modes

Autopilot Mode	Standard
Storm Mode	Standard
Morning Cleaning Mode	Standard
Evening Cleaning Mode	Standard
Snow Mode	Optional
Hail Mode	Optional
Night Mode	Standard
Rain Mode	Optional
Grid Loss	Standard
Cloud Mode	Optional
Flood Mode	Optional



Power Supply Properties

Input Power	AC-Powered (220V) ■	DC-Powered □
Power Feed	SPC □ String □ Auxiliary step-down transformer as option ■	
Back-Up Battery for Grid-Loss	UPS as an option ■	LFP □ Li-ion □
Daily Energy Consumption per Tracker	Up to 0.05 kWh	
Protection	AC over-current	
	DC over-current	
	Over-heat	
	Over-voltage	
	Reverse polarity	



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