



ArcelorMittal

exosun

# Technical datasheet A-Motion™

## A-Motion™

Brighten your solar tracking experience

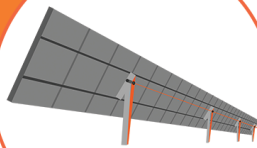
Sizing a structure to resist to maximum wind loads in only one position is a way for manufacturers to easily reduce the cost of the product. In return it increases the risk of failure of the system.

**A-Motion™ is the only tracker on the market to get rid of this weakness, being designed to resist to the maximum wind loads in any position.**

Whatever may happen on the control command or the drive train, the structure & modules remain safe.

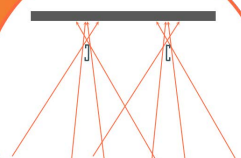


1 linear actuator per post to be as stable as a fixed structure



1 actuator per post

Small girders reducing the shading on rear side of bifacial modules



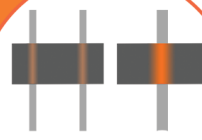
Bi-facial compatibility

Single-row architecture with high drive line for easy access and flood & grass compatibility

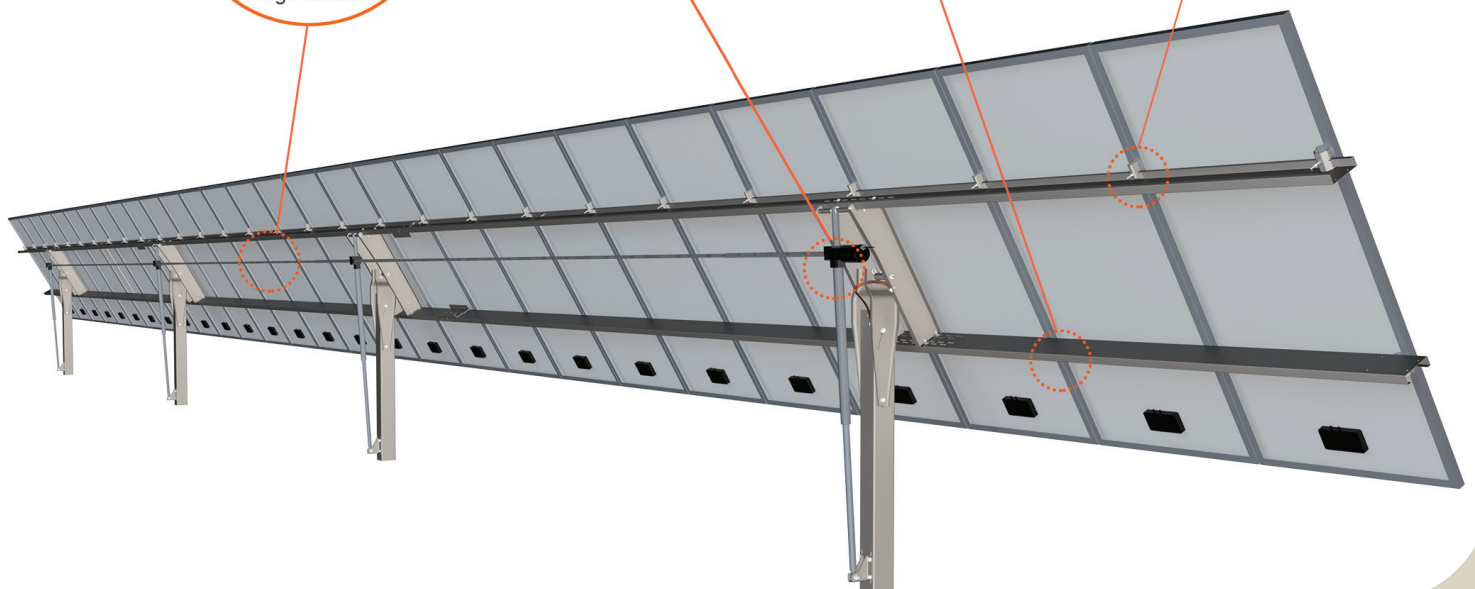


High driveline

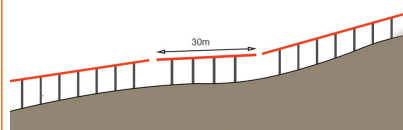
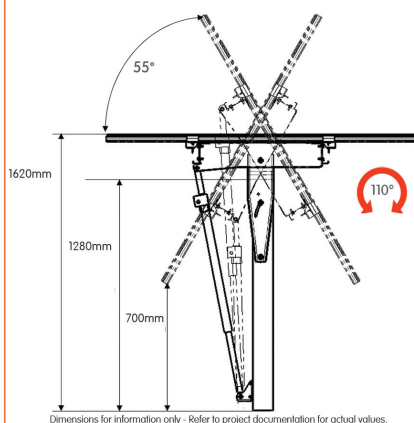
Dual beam structure to reduce stress & micro-cracks on modules



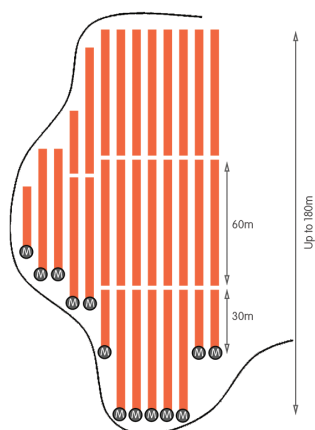
Dual-beam



# Technical specifications



Magnelis®



Independent rows with one 24V DC motor for multiple tables (up to 180m). Modular table & tracker length for optimized footprint

General characteristics	
Tracker Type	Horizontal single axis tracker (HSAT), independently driven rows
Modules supported	cSi Modules, FS6 modules
Modules compatibility	Mono-facial & Bi-Facial
Module configuration	1 in portrait
Table length	Flexible design with tables of 30 m to 60 m
Strings per table	1 to 2 strings (cSi) / 5 to 10 strings (FS6)
String voltage	1000 / 1500 V
Maximum linked tables	Up to 180m in North/South Direction
Temperature range	-20° ; +50° C
Mechanics	
Slope acceptance	North-South: ±10% East-West: unlimited
Tracking range	110° (120° on demand)
Drive type	Mechanical linear actuators
Module fixation	Self grounded proprietary clamp
Materials	Steel
Coatings	Atmospheric conditions: C1 to C4 Post Protection: design based on geotechnical survey
Design Loads	
Wind load as a standard	Site specific. Up to 33.7 m/s (EN 1991), up to 135 mph (ASCE 7-10) & Region C (AS 1170-2)
Snow load as a standard	500 N/m <sup>2</sup> (EN 1991) - 10 psf (ASCE 7-10) Higher snow loads on demand
Other standards	Design load according to other codes available on demand
Stow Position	NO STOW Position required (A stow position can be configured on demand)
Wind protection	Safe in any position with 1 linear actuator per post
Snow & flood sensors	Yes
Control & Motorization	
Power supply	3 options available: grid-powered, self-powered, string-powered
Motors per MWp (indicative)	15
Tracking method	Astronomical algorithm
Tracking accuracy	2°
Backtracking	Individual backtracking
Motor type	24V DC, 90W
Environnement rating	IP 65
Communication	Modbus; 2 options: wireless (zigbee), wired (RS485)
Supervision	Fully integrable into client's SCADA Dedicated remote interface also available
Installation	
Number of posts per MWp	Nominal 370 / MWp
Type of posts	Standard: C-posts. Other sections available on demand
Ramming tolerances (posts top location)	± 50 mm xy, ± 60 mm z, ± 1.5° vertical tilt, ± 8° torsion
In-field operations	No specific operations on-site (no welding, no drilling...)
On-site training & commissioning	On-site supervisor dedicated to your project
Warranties	
Warranties	5 years on drive train - 10 years on structure Including corrosion & no stow. Extension available on demand.
Certification	
Compliant with	IEC 62817 - UL 2703 / 3703