

Comune di MONTALTO DI CASTRO

Provincia di VITERBO

Regione LAZIO



PROPONENTE

SOLARSAP TRE SRL

Via di Selva Candida, 452
00166 ROMA (RM)
P.I. 17267661001

OPERA

PROGETTO DEFINITIVO

IMPIANTO DI PRODUZIONE DI ENERGIA ELETTRICA DA FONTE
RINNOVABILE AGRIVOLTAICA DI POTENZA NOMINALE PARI A 32.085,60
kWp E RELATIVE OPERE DI CONNESSIONE ALLA RETE RTN

"SOLARE MONTALTO DI CASTRO GUINZA BELLA"

OGGETTO

TITOLO ELABORATO :

SCHEDA TECNICA TRACKER

DATA : 1 dicembre 2023

SCALA : ---

N°/CODICE ELABORATO :

Tipologia : EL (ELABORATI)

EL 040

I TECNICI

PROGETTISTI:



EDILSAP s.r.l.
Via di Selva Candida, 452
00166 ROMA
Ing. Fernando Sonnino
Project Manager

TIMBRI E FIRME:



00	202300204	Emissione per istanza VIA e AU	EDILSAP srl	Ing. Fernando Sonnino	Ing. Fernando Sonnino
N° REVISIONE	Cod. STMG	OGGETTO DELLA REVISIONE	ELABORAZIONE	VERIFICA	APPROVAZIONE

Proprietà e diritto del presente documento sono riservati - la riproduzione è vietata



iTracker XL: engineered for safety

iTracker XL can host up to 120 large PV modules, protecting them from aeroelastic instabilities thanks to its innovative multi-drive system



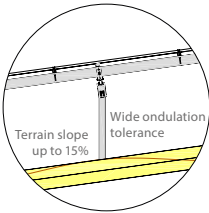
iTracker XL

Larger Tracker - Better Solutions



Leading-edge tracking algorithm

- Three-dimensional backtracking for each individual tracker
- Maximised collection of diffused radiation during cloudy periods



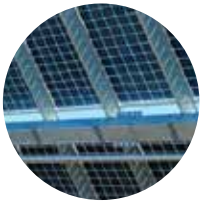
Terrain adaptability

- Maximum flexibility for complex borders and undulated terrains
- North South slopes up to 15%



Facilitated O&M

- Proprietary NFC app to support fast commissioning and seamless O&M
- Large corridors facilitate cleaning operations



Optimised for bifacial and agrivoltaics

- Gap between modules minimises shadow from torque tube
- Flexible height to meet the most demanding agrivoltaic needs



Unique wireless system

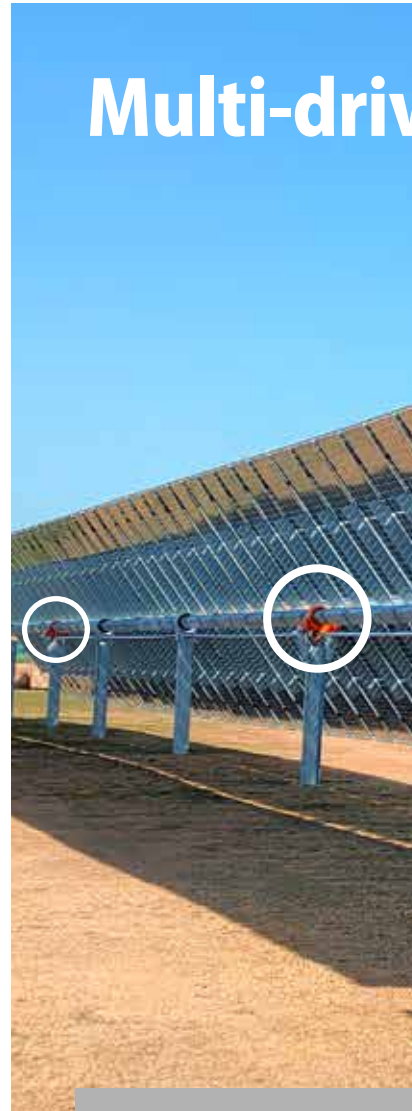
- Low power consumption and long life batteries (up to 5+ days of autonomy)
- Long range communication



Ease of installation

- Fewer foundation piles per MW minimise ramming time
- Facilitated installation of PV modules to avoid height risks

Multi-drive





Wind resilience

- Multi-drive blocks protect against dynamic instability
- Locked-in horizontal stowing minimises stress on foundations

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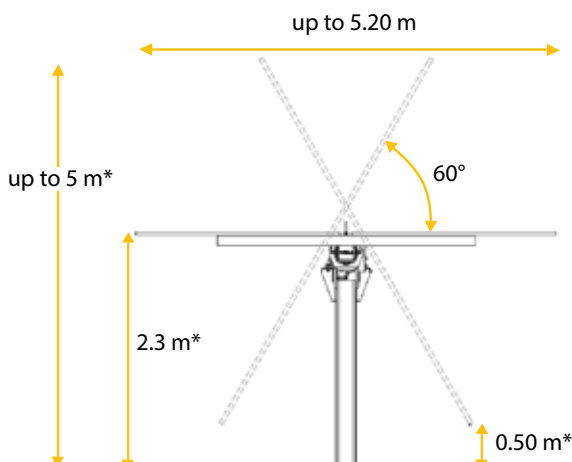
Certified quality

- Certified according to ISO 9001/14001/45001
- CE marked according to the Machinery Directive 2006/42/UE



Technical features

Tracking type	Independent single axis horizontal tracker Any tracker alignment possible (ideally along North-South direction)
Tracking algorithm	Accurate astronomical formulas; tracking precision = 1.0°. Individually customized 3D backtracking to follow terrain undulations
Rotation range	±60°
Ground cover ratio	Freely configurable by customer (between 34% and 50%)
PV Module compatibility	Framed modules; all major brands
Module mount	2 modules portrait
Drive system	independent motor serving a multidrive system for each tracker
Peak power per tracker	Up to 71 kWp per tracker (with 550Wp modules)
N° of Module per tracker	Up to 120 modules (1500 V)
PV array voltage	1000 V or 1500 V
Power supply	Self powered with dedicated small PV module and Li-FePO ₄ battery
Communication	Soltigua wireless radio network
Monitoring	Local control via SCADA; remote control available
Foundation type	Standard: driven piles
Wind resistance (Eurocodes)	In operation: up to 70 km/h in any position Stow position: up to 160 km/h in stow position
Snow resistance	Up to 1'500 N/m ² ; depending on tracker version
Tracker stowing time	≤ 6 min; 3.5 min on average
Installation tolerances	North South: ±40 mm East-West: ±25 mm standard pile; ±25 mm drive pile Height tolerance: ±40 mm Pile tilt: ±1° Twist: ±7,5°
Ground slope	Max 15% slope in longitudinal direction (North- South) Any slope in transversal direction (East-West) [max 70% local slope for rotation clearance] Local deviation from theoretical ground profile is ±150 mm
Installation method	Engineered for fast and easy assembly; no welding nor drilling required on site
Materials	HDG, Z and ZM construction steel; maintenance free bearings; triennial maintenance for slew drive
Certifications/Compliance	CE 2006/42/UE; Eurocodes EN1991-1-1/3/4; LV 2014/35/UE; EMC 2014/30/UE ; ISO 9001-2015; ISO 14001-2015 and ISO 45001-2018
Warranty	Structure: 10 years Drive batteries and electronics: 5 years Corrosion: 30 years in C2 atmospheric environment Warranty extension available
Earthing	The rotating structure is connected to the ground through its drive pile; PV module frames are connected to the rotating structure with n.1 star washer for each module



*= reference dimensions - can change based on PV module dimensions and on project specs



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