Comune di : BONORVA

Provincia di : SASSARI

Regione : SARDEGNA

PROPONENTE

Firmato digitalmente da

PASQUALE VITOLO

CN = VITOLO PASQUALE
SerialNumber = TINIT-VTLPQL63R11H501I
C = IT
Data e ora della firma: 10/10/2023 16:18:07

SOLARSAP UNO SRL

Via di Selva Candida, 452
00166 ROMA (RM)
P.I. 17164341004

Firmato digitalmente da

FERNANDO SONNINO

CN = SONNINO FERNANDO
SerialNumber = TINIT-SNNFNN61H18H501A
C = IT

OPERA

PROGETTO DEFINITIVO

IMPIANTO DI PRODUZIONE DI ENERGIA ELETTRICA DA FONTE RINNOVABILE AGRIVOLTAICA DI POTENZA NOMINALE PARI A 42.344,64 kWp E RELATIVE OPERE DI CONNESSIONE ALLA RETE RTN

"SOLARE BONORVA S'ENA 'E SUNIGO"

OGGETTO

TITOLO ELABORATO :

SCHEDA TECNICA TRACKER

DATA : 09 agosto 2023

SCALA : ---

N°/CODICE ELABORATO : EL 036

Tipologia : EL (ELABORATI)

I TECNICI

PROGETTISTI:

EDILSAP

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

TIMBRI E FIRME:

Dott. Ing. FERNANDO SONNINO ORDINE INGEGNERI ROMA n. A 15616 settore a-b-c

00	202203491	Emissione per Progetto Definitivo - Istanza di VIA e A.U.	EDILSAP srl	Ing. Fernando Sonnino	Ing. Fernando Sonnino
N° REVISIONE	Cod. STMG	OGGETTO DELLA REVISIONE	ELABORAZIONE	VERIFICA	APPROVAZIONE

iTracker XL: engineered for safety

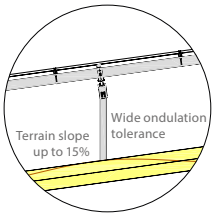
iTracker XL can host up to 120 large PV modules, protecting them from aeroelastic instabilities thanks to its innovative multi-drive system

soltigua™
solar tracking since 2007

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 ondulated 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

Sub-1GHz

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

Wind resilience

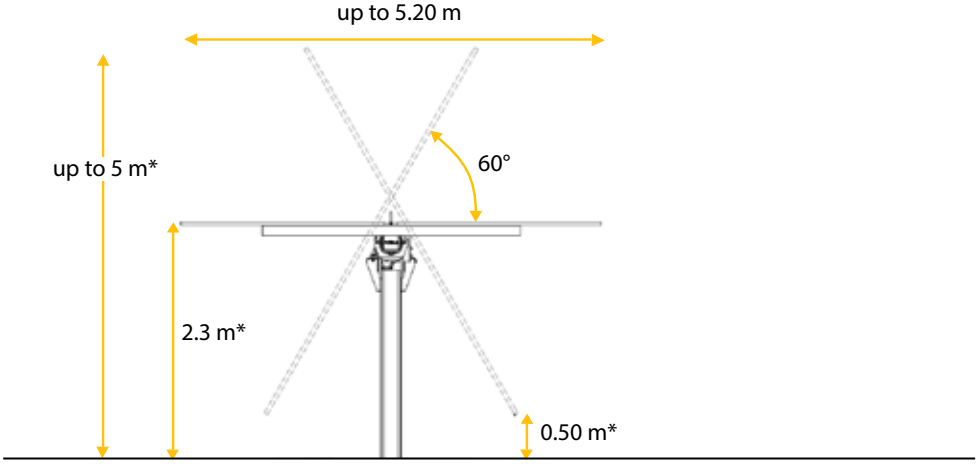
- Multi-drive blocks protect against dynamic instability
- Locked-in horizontal stowing minimises stress on foundations

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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solar tracking since 2007

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