

# CONVERT **TRJ**

SINGLE AXIS TRACKER

Technical Data Sheet  
English Version

the **future**  
is on **track**

# CONVERT TRJ - TECHNICAL DATA SHEET

## TECHNICAL SPECIFICATION

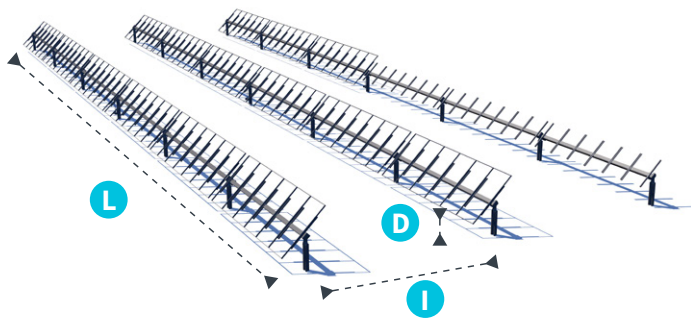
|                                     |   |
|-------------------------------------|---|
| <b>Tracker type</b>                 | Horizontal single axis North-South alignment and East-West tracking with backtracking and independent rows                |
| <b>Tracking control system</b>      | Control system controlled by astronomical clock; self-configuring; no sensor required                                     |
| <b>Maximum tracking error</b>       | $\pm 1^\circ$ (-0,015% power max)   |
| <b>Control system architecture</b>  | 1 electronic control board for 10 rows with GPS system integrated and anemometer for wind safety                          |
| <b>PV-modules type</b>              | Crystalline pv - modules  |
| <b>Number of modules per row</b>    | From 30 up to 42 pv modules per row   |
| <b>Max. peak power per tracker</b>  | Up to 13,44 kWp @ pv - modules 320 Wp   |
| <b>Rotation angle</b>               | Up to $\pm 55^\circ$  |
| <b>Driven gear</b>                  | 1 linear actuator (IP65) per row: 230V -50 Hz (CE); 240V -60 Hz (CE,UL)   |
| <b>Power supply and consumption</b> | - GRID POWER AC input ( 27 kWh/year per tracker)<br>- SELF-POWERED from PV-modules (no battery, no grid, patented system) |
| <b>Monitoring and data feeds</b>    | Real-time local or remote communication data provided via ModBus from control board to SCADA                              |
| <b>Communication</b>                | - WIRE - RS485 cable between electronic control board and SCADA<br>- WIRELESS network                                     |
| <b>Maximum wind speed</b>           | According to the local codes  |
| <b>Foundation</b>                   | Driven pile; ground screw; concrete   |
| <b>Grounding method</b>             | Self-grounding structure  |
| <b>Material</b>                     | Galvanized steel  |
| <b>Ground coverage ratio</b>        | Configurable on the basis of project design: from 0.35 to 0.50  |
| <b>Availability</b>                 | > 99%   |
| <b>Warranty</b>                     | 10 years on structure components; 5 years on drive and control system   |

## INSTALLATION TOLERANCE

### ASSEMBLY ERROR RECOVERY

|                     |  |
|---------------------|--|
| <b>Height</b>       | $\pm 20$ mm  |
| <b>North/South</b>  | $\pm 35$ mm  |
| <b>East/West</b>    | $\pm 20$ mm  |
| <b>Inclination</b>  | $2^\circ$  |
| <b>Twist</b>        | $5^\circ$  |
| <b>Land grading</b> | $\pm 3^\circ$ North/South; no limitation East/West |

## CONFIGURABLE FOR SPECIFIC PROJECT



**I Inter-axis**  
min. dimension: 4 m

**L Length**  
from 31 to 43 m

**D Height above ground**  
0,35 m



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