

# CONVERT **TRJ**

SINGLE AXIS TRACKER

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

 **CONVERT**

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## BEARING TRANSMISSION

Spherical self lubricated plain bearing of Convert design to compensate inaccuracies and error in mechanical structure installation

## CONTROL BOARD

Easy to install and self-configuring control board. The integrated GPS always triggers the right geographical location to the system for solar automatic tracking



## DRIVEN GEAR

“Independent raw” solution, with unique independent double dust protection ring AC engine

## STRUCTURE

Completely balanced and modular, the TRJ structure does not require specialized personnel for installation and assembly



# CONVERT TRJ - TECHNICAL DATA SHEET

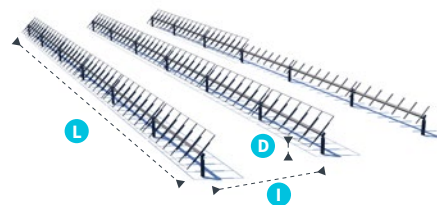
## TECHNICAL SPECIFICATION

<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) - 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 - 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

<b>ASSEMBLY ERROR RECOVERY</b>	
<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**





**PLUG & TRACK**

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