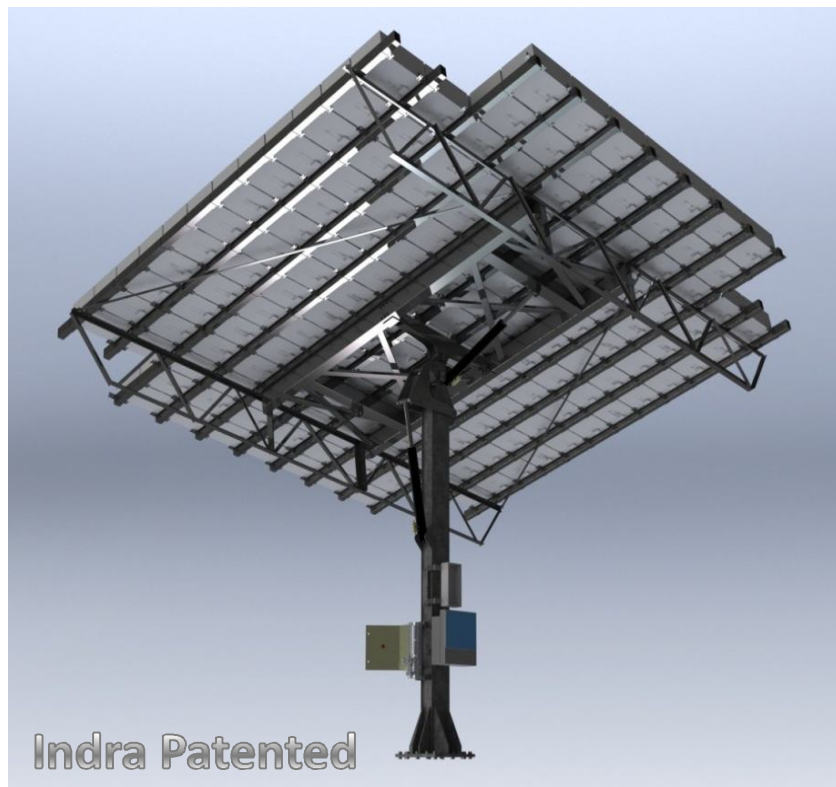




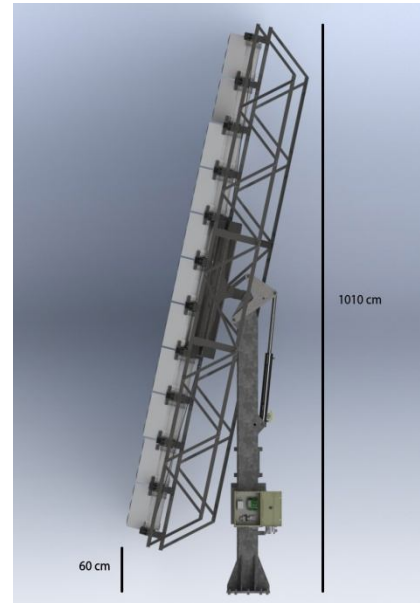
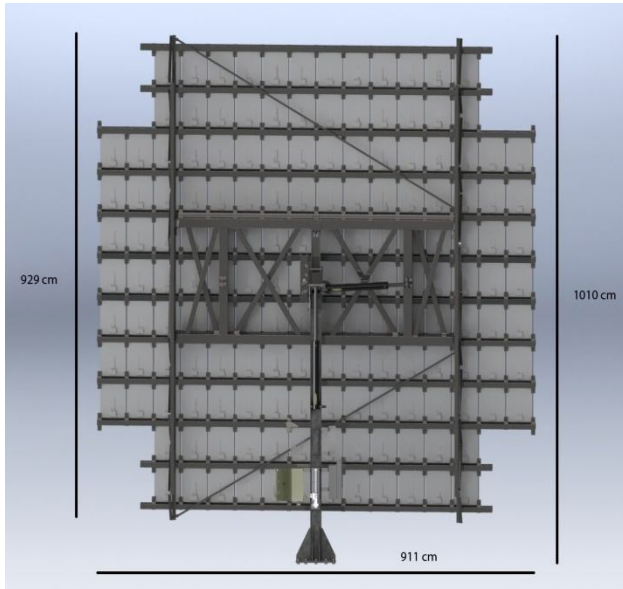
ICST-70/IST-120 Solar Tracker



Introduction

Designed and developed based on the following main goals:

- Mechanical simplicity and robustness, allowing easy mounting and maintenance as well as the capability to endure the most demanding environments
- Technological state of the art. It incorporates a sophisticated control system developed by Indra that makes it capable to tilt at extreme positions gathering energy from sunrise to sunset with a very high accuracy and being suitable for standard PV, High Concentration Photovoltaics (HCPV) or as heliostat. Aiming is based on two closed-loop control systems that takes in mind astronomical sun position versus surface position and collected power
- Advanced SCADA system, showing all relevant information on the current status of energy production, environmental data, aiming position, and other variables monitoring safety conditions of the tracker and panels



Mechanical Specification

Framework	Galvanized steel
Total surface (*)	84m ² (9.109 m X 9.293 m)
Tracking Axes	Dual axis
Azimuth range	-130 ° to +130 °
Elevation range	0 to 82°
Motion system	Hydraulic system & electromechanical linear actuators
Wind Survival @stow position	145 Km/h
Max. wind speed during tracking	60 Km / h
Max. mass supported	60 Kg / m ²

(*) Total surface can be modified for new requirements

Control Specification

Accelerometer sensor accuracy	0.1°
Accuracy from sun position	< 0.3 °
Time between movements	30 – 60s
Time of movement	< 5s
Time for stow position	< 6'
Manual control	Yes
Emergency button	Yes
Communications	Ethernet, Canbus, I2C, SPI
Analog inputs	4-20mA
Digital inputs/outputs	0-24Vdc

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