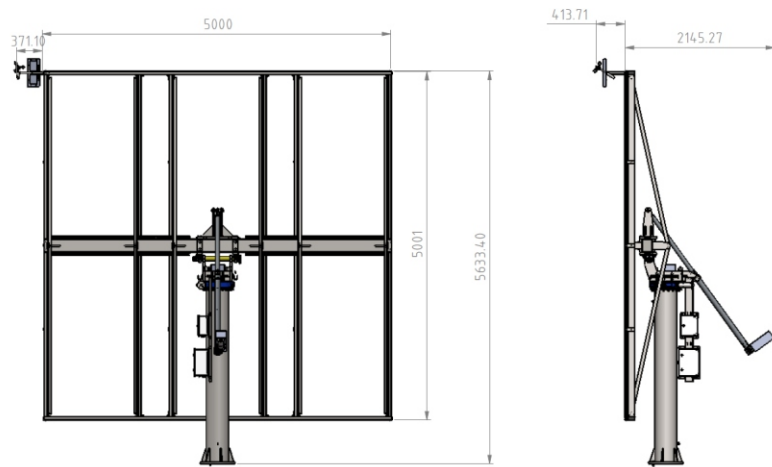


Dimensions



Description

The BSQ-HASTLA/25 CPV System is specially designed as a laboratory tracker.

These laboratory trackers are something unique in the market as they combine high accuracy subdegree sun tracking accuracies, with a sturdy tracking structure with aperture surfaces of as much as 25m², especially designed for holding different models of CPV or PV modules of different sizes

Using proprietary auto-calibrated open loop tracking control, the tracker achieves 0.1-degree minimum average pointing accuracy. It efficiently manages wind and night stow positions for safety and reliability. Supplied software monitors and controls system performance.

Features

Performance

- > Numerically optimized aperture surface for least structural weight and cost
- > Auto-calibration for maximum tracking accuracy
- > Landscape collecting surface profile for least shadowing loss
- > Wide range of motion for maximum energy harvest
- > Suitable for intertropical zones

Reliability

- > Hot dip galvanized structure
- > Controller design according to electrical safety and EMC standards and tested in harsh climatic conditions.

Specifications

Mechanical

Aperture - Height	5.63 m
Aperture - Width	5.00 m
Aperture - Area	25.00 m ²
Coverage Radius	3.54 m
Maximum Height	5.63 m
Unloaded Weight	1205 kg
Weight with modules	N/A

Structural Properties

Max. Service Wind Speed	12 m/s
Max. Flexure @ Max. Service Loads	0.3 °
Max. Wind Load (resistance limit)	40 m/s

Tracking Drive

Tracking Geometry	Az.-El.
Azimuth Range	±160 °
Elevation Range	0 ° to 90 °
Azimuth Gearing	Worm gear
Elevation Gearing	Screw Jack
Tracking Mode Max. Speed	15 °/min
Manual Mode Speed	18 °/min
Max. Azimuth power consumption	40 W
Max. Elevation power consumption	100 W
Power consumption in idle mode	38 W
Max. daily energy consumption	490 Wh
Max. time to stowage	8 min
Max. backlash	0.04 °
Axes turning angle measurement	Optical encoder
Limit switches	Soft and hard

Tracking Controller

Pointing Accuracy (Average)	0.05 °
Pointing Accuracy (Std. Dev.)	0.04 °
Min. Positioning Resolution	0.05 °
Position Resolution	0.018 °
Sun Ephemeris Mean Accuracy	0.01 with built-in GPS
Wind Stow Condition	12 m/s
Basic Connectivity	RS232-485
Tightness Condition	IP65
Temperature Range	-10 °C to 60 °C

Surface Configuration

Construction	Extruded aluminum profile
Area	25m ²
Vanes	Three vanes 1.36mx5m

