### Dimensions

The BSQ-D280/9 CPV Sun Tracker tracking system has been engineered, for BSQ’s D280 HCPV module, to achieve optical quality stiffness, sub degree pointing accuracy, and extended tracking range, to deliver the highest energy production at cost effective cost. 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.

### Specifications

#### Mechanical

- **Aperture - Height (m)**: 2.04
- **Aperture - Width (m)**: 4.24
- **Aperture - Area (m²)**: 8.65
- **Coverage Radius (m)**: 2.45
- **Maximum Height (m)**: 2.45
- **Unloaded Weight (kg)**: 655.3
- **Weight with modules (kg)**: 847.3

#### Structural Properties

- **Max. Service Wind Speed (m/s)**: 10
- **Max. Flexure @ Max. Service Loads (deg)**: 0.3
- **Max. Wind Load (resistance limit) (m/s)**: 28
- **Lowest Resonance Frequency (Hz)**: 3

#### Tracking Drive

- **Tracking Geometry**: Az.-El.
- **Azimuth Range (deg)**: ±160 (adjustable)
- **Elevation Range (deg)**: 0 to 90
- **Azimuth Gearing**: Worm gear
- **Elevation Gearing**: Screw jack
- **Tracking Mode Max. Speed (/min)**: 18
- **Manual Mode Speed (/min)**: 136
- **Max. Azimuth power consumption (W)**: 130
- **Max. Elevation power consumption (W)**: 47
- **Power consumption in idle mode (W)**: 1250
- **Max. daily energy consumption (Wh)**: 8
- **Max. time to stowage (min)**: 0.04
- **Max. backlash (deg)**: Optical encoder
- **Axes turning angle measurement**: Soft and hard
- **Limit switches**: Printed on recycled paper. Design and specifications are subject to change without notice

#### Tracking Controller

- **Min. Pointing Accuracy (Average) (deg)**: 0.1
- **Min. Pointing Accuracy (Std. Dev.) (deg)**: 0.04
- **Min. Positioning Resolution (deg)**: 0.05
- **Position Resolution (deg)**: 0.018
- **Sun Ephemeris Mean Accuracy (deg)**: 0.01 with built-in GPS
- **Wind Stow Condition (m/s)**: 12
- **Basic Connectivity**: RS-232-485, Modbus
- **Tightness Condition**: IP65
- **Temperature Range (°C)**: -10 to 60

#### Array Configuration

- **No. Panels**: 8 (2.24kW@STC)
- **No. Panels per String**: 4
- **No. Parallel Strings**: 2

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