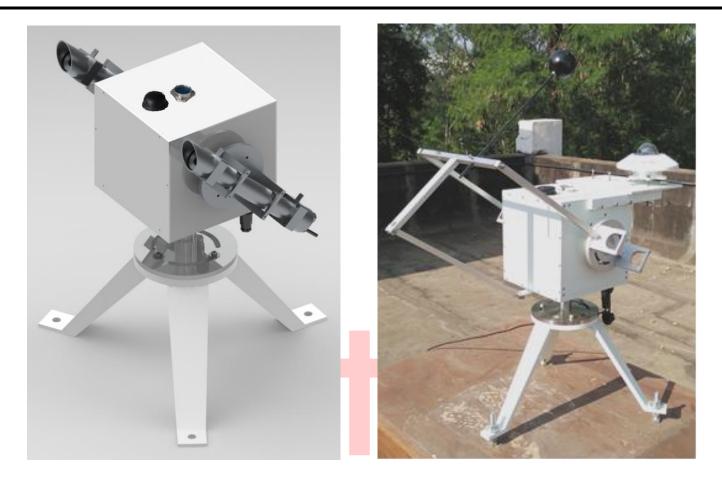
Solar Tracker (Dual Axis)





The dual axis solar tracker (Model No.: V-SOL-2A2P) is an all-weather positioning platform used to point specialized instruments/sensors at the sun's movement across the sky. It is fully automatic and does not require a computer or software installation to control the tracking of Sun movement. The integrated GPS receiver automatically configures location and time data. An RS-232 port allows for software upgrades. The high- efficiency gear drive system requires no maintenance. The tough and distinctive cast aluminum housing has an integrated tripod stand with leveling feet. A side plate with mountings for a pyrheliometer is included as standard and a second side mounted plate can be fitted for an additional pyrheliometer.

Specifications:

Axis of Motion Two Axis +/-0.2° Pointing Accuracy Resolution 0.01° • Transmission Stepper motor Gear driven (no belt) • Internal Clock **GPS** Synchronized • 30Nm Torque • Payload Capacity 30Kg • Max. Angular Velocity 5º /s • 540° **Azimuth Rotation** • -90° to +90° Zenith Rotation -5° to +95° • without shading ball assembly with shading ball assembly **Over Rotation Protection Optical Sensor** The system has a GPS (Global Positioning System) to acquire data i.e. Methodology (Microcontroller and GPS Latitude, Longitude and exact GMT time etc. The movement of the sun

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	based control)	tracker is controlled by stand alone 16 Bit low power MCU system (using GPS data) only. High sensitivity external antenna -159db, Low noise LNA & SAW		
		band pass filter. There is no such dep	-	
		any other computer or data logger, after		
		continuous tracking of the Sun.	er milde configuration, for unattended	
_	Power Up	Automatic Zero tracking		
•	•	-		
•	Manual Adjustment	Provision of manual adjustment & orientation also provided for fine tunir		
		after zero tracking on initial power up.		
•	Operating Temperature	0 to 60°C	(without heater)	
		-40 to 60°C	(with heater & AC Mains operation)	
•	Environmental Protection	IP65	Suitable for all weather use	
٠	Connectivity	RS232 (9600 baud)	(optional Ethernet/Wifi)	
٠	Mounting	Tripod (balancing screws & sprit	Flat surface is required for	
		bubble provided)	installation	
٠	Local Indications	Bright LEDs visible in sunlight	Power, Tracking &	
			GPS synchronizing status.	
•	Mounting provision	Two Pyrheliometer	Mounting kit provided (if opted)	
		Two Pyranometers	Top Plate provided (if opted)	
•	Shading Ball assembly	For two nos. Pyranometer sensors	(If opted) Shading ball assembly	
			with one or two shading ball	
			arrangement (either or bo <mark>th c</mark> an be	
			used) for two nos. pyranometer	
			sensors are provided	
•	Power Requirements	12V/4A (Max)	Optional :	
			Battery, charging unit (mains/	
			Solar) & Solar panel & Tripod stand	
			for mounting solar panel.	
•	Maintenance	Zero maintenance	(if operating on solar & batteries,	
•	Maintenance		lead acid batteries need annual	
			replacement)	
		HV	or or me	
Ordering Guide:				
	SN Description		Model No.	
•	1 Tracker with Two D	wholiomotor mounting position		

- 1 Tracker with Two Pyrheliometer mounting position 2 Tracker with Two Pyrheliometer & Two Pyranemeter mounting p
- 2 Tracker with Two Pyrheliometer & Two Pyranometer mounting position
- 3 Tracker along with Shading Ball Assembly for

Model No. V-SOL-2A2P V-SOL-2A2P-P V-SOL-2A2P-PS



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** Drawing / specifications are subjected to change at any time without prior notice as per manufacturing suitability.