

## INTRODUCTION TO SINGLE AXIS AUTOMATIC TRACKERS

Vistar Electronics Pvt; Ltd is pleased to announce the introduction of a single axis automatic Photovoltaic tracker-

Applications:

1. PV direct water Pumping systems: **Increased wire/water efficacy**  
The energy yield and water output is expected to be enhanced by approx 20-25% v/s fixed tilt solar installations.
2. Small grid connected systems-PV direct-Local Grid feed-PV direct systems/Battery charging PV array.

Product range:

s/n	Model Number	PV Module area Sq Mtr- Each *	No. of Modules *	Wp max/Module	Stand alone	Ganged Units	Max Nos that can be ganged by One actuator
1	AT-1-6	1.98x0.99	3	280/300 Wp	Y	Y	3
2	AT-1-8	1.98x0.99	4	280/300 Wp	Y	Y	3
3	AT-1-12	1.98x0.99	6	280/300 Wp	Y	Y	2
4	AT-1-16	1.98x0.99	8	280/300 Wp	Y	N	0
5	AT-1-18	1.98x0.99	9	280/300 Wp	Y	N	0
6	AT-1-24	1.98x0.99	12	280/300 Wp	Y	N	0

- \*: for Modules with different area & Type-please consult us giving module dimensions & Qty to install

Salient features:

1. Simple-sunrise-sunset mathematical equation based control-directives-real time clock based. Interface to a local Port available as option.
2. Decided by the site's "latitude and Longitude-" to be user specified.
3. Open loop system-capable of using actuator position reference for local knowledge-of the position.
4. Locally powered by a 12 V 20Wp solar panel and suitable Battery-charge regulator for the control supply to be active 24x7 ( 2 sunless day autonomy for sites-where daily average solar insolation is minimum 4.5 kwh/sq.meter/day)
5. Simple to install at sites. Local LCD display 2 x 16 alpha numeric type available.
6. Option to attach "manual operation fitments" when specified,.
7. Adjustment for fixed tilt-Due south/North for the installation location.  
East West Tilt tracking angle range coverage approx- -45-0-+45 deg facing due South/North.
8. Azimuth tracking @ fixed (adjustable tilt angles) are optionally available.

Specifications shown above are tentative-subject to change for design optimization.

Vistar Electronics Pvt. Ltd. December 2013