



[www.clamps.gr](http://www.clamps.gr)

Headquarters: 2<sup>nd</sup> klm P. S. Oreokastrou, Thessaloniki,  
tel. 0030 2310510260/fax:2310554088

e-mail: [info@clamps.gr](mailto:info@clamps.gr)

After many years of experience in fixed as well as mobile photovoltaic mounting systems, our company has created the new single axis (East-West) TRACKER SSH 5000 model.

It is the perfect solution in replacing already existing fixed mounted photovoltaic systems, since it increases efficiency by 25% to 30% (**TRACKER amortization in 2 to 3 years depending on price per KW**)

Furthermore it is used in new photovoltaic systems' constructions for reaching maximum possible efficiency.

It can be used for all types and all *dimensions* of photovoltaic modules (*bifacial*).

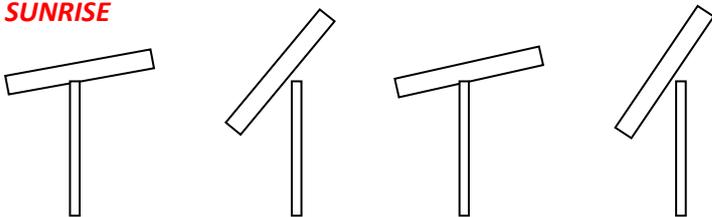
## Astronomic routine function combined with light sensor.

Every photovoltaic system is unique, due to its position. Therefore in each case, the control monitoring system is programmed using an astronomic calculation algorithm for the sun's movement. It includes a **backtracking** function to 100% avoid shading between adjacent rows and thus increasing efficiency by up to 30%.

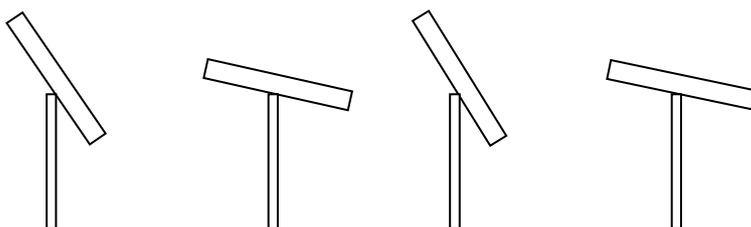
- The tracker is guided by the light sensor
- The astronomic routine only deals with **backtracking**.

**Backtracking** starts during the early morning hours of the sun rising as well as during the last hours of the sun setting, so as to make sure no panel is shaded at all during the course of the day.

### SUNRISE



### SUNSET



Up to **30%** more efficient performance

Maximizing number of trackers covering a smaller space.

Remote controlling of trackers at any given time.

Installation even on uneven terrain.

# **ADVANTAGES**

## **COMPETITIVE ADVANTAGES**

This type of tracking system can increase the power output up to 30% compared to ground-mounted fixed structure systems. It can be adapted to client's needs as per project's location. Installation training services can be provided at no cost.

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## **REMOTE CONTROLLING**

With constant **remote controlling** via mobile phone one has the ability to operate the tracker and give specific orders: In case of snowfall the (incline panels due East) order results in snow falling off the panel surface. Furthermore in the case of any damage/failure, one is informed via an automated sms through telemetry. For every order sent via mobile, the corresponding acknowledgment is received through the system. A wind sensor is connected, which gives an immediate automated order for horizontal positioning in case of intense wind pressure. When wind pressure is lessened, the panels once again move automatically to the correct angle, for maximum efficiency.

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## **ON-SITE WELDINGS NOT REQUIRED**

The entire tracker can be assembled with fasteners, therefore on-site welding is NOT required, reducing cost and mounting time.

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## **LAND ADAPTABILITY**

SSH5000 tracker has been carefully designed as to be perfectly adaptable to different types of terrain (including uneven terrain up to 10% inclination due South). Specially designed to provide high tolerance for easier installation plus a variety of different types of mountings.

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## **SIMPLE MODULAR ASSEMBLY**

Due to its design using screws for fastening, assembly of the Tracker lacks complexity, making the use of cranes or lifting equipment unnecessary and simplifying the installation process.

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## **HIGH PRECISION**

The sophisticated engineering design contains a small number of moving parts, diminishing tracking error and maximizing outcome, by working in tandem with an advanced astronomical software system and light sensor.

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## **MINIMUM MAINTENANCE**

Easy greasing of moving parts. Panels can be placed in a horizontal position at any time both manually as well as with a remote order via mobile phone for easy cleaning access.

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## **DEALING WITH MECHANICAL-ELECTRICAL ISSUES**

SSH 5000 design allows for easy replacing of all parts of mechanical equipment with minimum labor and replacement parts cost. All electrical components are also quite mainstream and can be found in most retail stores.

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