

**ELVAN**

FIXED  
STRUCTURE  
FOR PV SYSTEMS



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## FIXED STRUCTURES FOR PHOTOVOLTAIC SYSTEMS ELVAN - MECASOLAR

**MECASOLAR** is a Spanish multinational company, specializing in designing and manufacturing of structures for Photovoltaic systems. Established in 2005 it has up to now completed projects of more than 400MW in 45 countries.

**ELVAN S.A.** is a licensee of **MECASOLAR** for the production and delivery of fixed solar mounting systems, for the Greek and select international markets.

## PRODUCTS & SERVICES

**ELVAN & MECASOLAR** have launched an upgraded fixed structure, a robust, flexible and economically effective product that fulfills all customer needs.

Both companies comply with CE, ISO 9001:2008, ISO 14001:2004, certifications, ensuring excellent manufacturing quality and products that are environmentally and socially sustainable.



ISO 9001:2008



ISO 14001:2004



**SINGLE-POST SYSTEM:** It can carry 2 or 3 modules in portrait or landscape layout, respectively.  
**TWO-POST SYSTEM:** It can carry 3 or 6 modules in portrait or landscape layout, respectively.



**Fixed structure solutions**  
**ROBUST, VERSATILE**  
**and ECONOMICALLY EFFICIENT**

**ELVAN** and **MECASOLAR** are both strongly committed to serving customers. To fulfil the needs of customers, a range of supplementary services are offered:

- **Structure custom design adjusting to the project's needs** regarding **structural loads** as well as **electrical design**.
- **Support and management regarding construction work, low and medium voltage, and configuration of modules and inverters:** our engineering department is ready to help customers at all times.
- We adapt to the project management's requirements, **planning deliveries according to customers, needs and managing the logistics of the project in a comprehensive, coordinated way.**





## COMPETITIVE ADVANTAGES

### FAST ASSEMBLY AND LITTLE INSTALLATION WORK

The structure contains C-shaped profiles with custom cut length that are easily assembled with screws and bolts. All the parts are lightweight and can be easily handled by the assembly team, which means installation times are short.

### LITTLE VOLUME AND LOW SHIPPING COST

Bars take up very little room, reducing shipping costs.

### INSTALLATION ON ALL TYPES OF GROUND

**MECASOLAR** structures can be installed on profiles directly thrust into the ground. However, in terrains where this cannot be done, the system is set up on concrete micro-piles, surface concrete footings or **mecascrew** foundation screws.

### LONG-TERM DURABILITY

The steel framework, coated with hot-dip or continuous galvanising methods depending on each project characteristics, complies with the ISO 1461:2009 standard.

Dacromet or stainless steel fastenings are used to assemble the frame.

Drilling holes or cutting components are not done on site, thus avoiding the risk of corrosion.

### INSTALLATION VERSATILITY

We carry single-post systems that hold 2 or 3 modules in portrait or landscape layout, respectively, and two-post systems that hold 3 or 6 modules in portrait or landscape layout, respectively. The orientation angle of mecasolar structures ranges between 0° and 45°.

### MODULE FASTENING

Modules are fastened with aluminium clamps. The system designed by **mecasolar** can support all types of modules, as no hole drilling is required.

### EXTREMELY RESISTANT TO ANY TYPE OF WEATHER

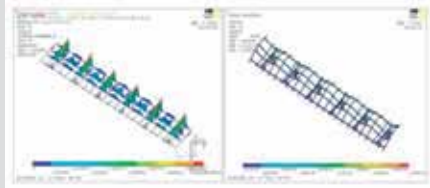
Our equipment can resist wind and snow loadings in compliance with the local regulations in force.

## EXPERIENCE



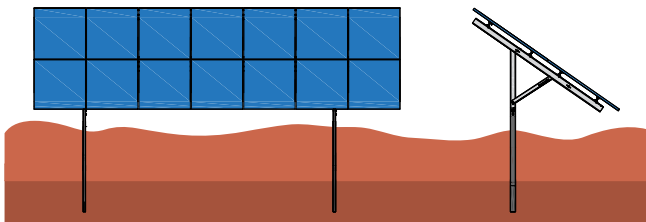
## TECHNICAL SPECIFICATIONS

Orientation angle	Determined by the customer (0°- 45°).
Module capacity and structure design	Up to 3 rows portrait layout. Up to 6 rows landscape layout.
Minimum distance to the ground	Variable, as required by the customer.
Maximum difference in ground level	Polygonal adjustment to the ground Difference in ground level supported by foundation $\pm 20$ cm.
Anti-corrosion treatment	Steel treated with hot-dip or continuous galvanising method.
Module assembly	Special aluminium fastenings.
Modules	All types of PV modules.

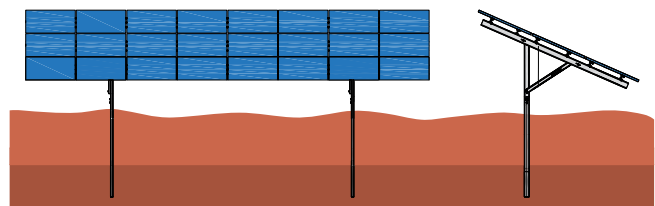
Anchoring system	Concrete footing, flag or pile. Metal screw directly driven or thrust into the ground.
Standards	EC, ASCE, AS NZS, CFE, IS, NCH, SANS.
Loading	Equipments can hold up to 5,000 N/m <sup>2</sup> .
Fixed structure is checked by means of special software	

## STRUCTURE CONFIGURATION

### SINGLE-POST SYSTEM:

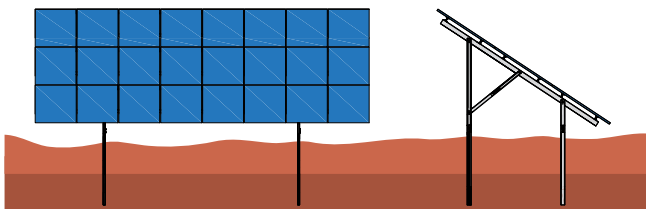


2 modules in portrait layout

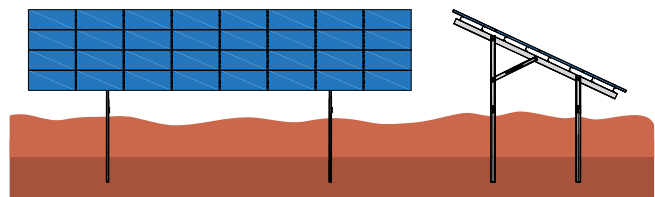


3 modules in landscape layout

### TWO-POST SYSTEM:



3 modules in portrait layout



4 to 6 modules in landscape layout



ISO 9001:2008



ISO 14001:2004



OHSAS 18001:2007



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