ELVAN

PV MOUNTING SYSTEMS

FIXED PHOTOVOLTAIC SUPPORT STRUCTURES

www.elvansolar.gr

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ELVAN S.A. is an over 40 year-old Greek industry, and one of the largest European manufacturers of certified-quality cable trays and support systems. **ELVAN** products are designed and manufactured exclusively in Greece.

Our company is committed to servicing the needs of our customers and, to that end, offers a series of additional services: Our company is committed to the needs of our customers and, to this end, offers a series of additional services:

- Design of each customer's fixed structure according to the particularities of each project (siting, dimensioning, planning etc.)
- Support for all matters regarding completion of the project by specialized staff.
- Installation of the support system (pile placement, structure assembly, panel fastening)

PRODUCTS / SERVICES

ELVAN enters the market with an optimized fixed photovoltaic support system to satisfy the evolving needs of our customers. Our product is a durable, versatile and efficient solution for any photovoltaic project.

ELVAN holds the CE, ISO 9001:2008, and ISO 14001:2004 certificates, which affirm the excellent quality of our products, as well as our respect for the natural environment and our contribution to sustainable economic development.

ISO 9001:2008

ISO 14001:2004

SINGLE-PILE: Capable of supporting up to 2 panels in vertical configuration or 3 in horizontal configuration.

DOUBLE-PILE: Capable of supporting up to 3 panels in vertical configuration or 6 in horizontal configuration.

Solutions for DURABLE, VERSATILE and COST-EFFECTIVE Fixed Support Structures

Our company is clearly oriented towards satisfying the needs of the client. To fulfill this mission, we provide:

- **Adaptation of the fixed structure plan to the needs of the project,** taking into account both **structural loads** and **electrical drawings**.
- **Support and administration** for all matters regarding **civil engineering, low/medium voltage and panel/inverter works**, by the company's technical department.
- **Programming of deliveries according to the client's needs** and managing **supply in a coordinated fashion** to cater to the administrative needs of each project.

COMPARATIVE ADVANTAGES

QUICK ASSEMBLY AND OPTIMIZED INSTALLATION

The frame consists of C-type profiles, cut by delivery for easier fastening by means of screws. Low weight allows for easier handling by installation crews, drastically reducing installation times.

MINIMAL VOLUME AND TRANSPORTATION COSTS

The profiles take up volume in an optimal fashion, thus reducing transport-related costs.

MAXIMUM DURABILITY

The frame's profiles are made of pregalvanized steel or hod-dip galvanized steel according to the ISO 1461:2009 standard, depending on the project's needs. Fasteners used for assembly of the frame are made of stainless steel or lined with anticorrosive Dacromet coating.

Perforations or cuts on site are not required; this makes for easier assembly and avoids any risk of corrosion.

INSTALLATION ON ANY GROUND TYPE

Our company's structures are designed for installation on piles directly inserted into the ground; in cases where this practice is precluded due to the characteristics of the ground, installation on concrete micropile foundations.

ADJUSTABILITY FOR INSTALLATION

We offer single-pile support structures capable of supporting 2 photovoltaic panels in vertical configuration and up to 3 panels in horizontal configuration, as well as double-pile structures capable of supporting 3 panels in vertical configuration and up to 6 panels in horizontal configuration. Inclination range varies from 0° to 45°Διαθέτουμε βάσεις στήριξης μονού ορθοστάτη ικανές να υποστηρίξουν 2 φωτοβολταϊκά πάνελ σε κάθετη διάταξη και μέχρι 3 πάνελ οριζόντια, καθώς και βάσεις διπλού ορθοστάτη που μπορούν να φέρουν 3 πάνελ σε κάθετη διάταξη και μέχρι 6 οριζόντια. Το εύρος της κλίσης των βάσεων είναι 0° μέχρι 45°.

PHOTOVOLTAIC PANEL FASTENING

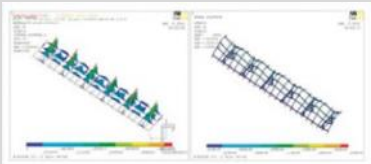
Panels are fixed onto the structure by aluminum clamps. The system is designed to allow for any type of panel, as it is not necessary to perform perforations of any type to the panel.

MAXIMIZED DURABILITY TO WEATHER CONDITIONS

Our products are designed to withstand wind and precipitation loads as defined by the regulations that apply for each project site.

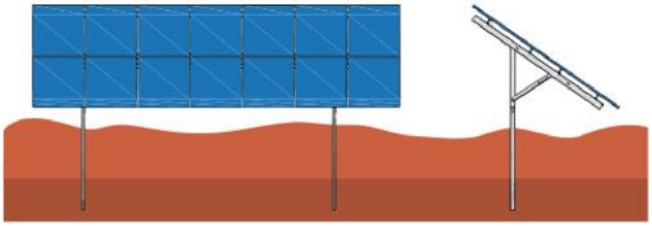
TECHNICAL SPECIFICATIONS

Inclination	As specified by the client (from 0° to 45°).
Configuration capabilities for photovoltaic panels	Up to 3 vertical rows. Up to 6 horizontal rows.
Minimum ground-panel distance	Distance varies according to the client's specifications.
Tolerance for uneven ground	Polygonal adjustment to ground level. Πολυγωνική προσαρμογή στο έδαφος. tolerance for height difference to the foundation ±20cm.
Anticorrosive treatment	Frame made of pregalvanized or hot-dip galvanized steel.
Panel fastening	By means of aluminum clamps.
Supported photovoltaic panel types	Any panel type.

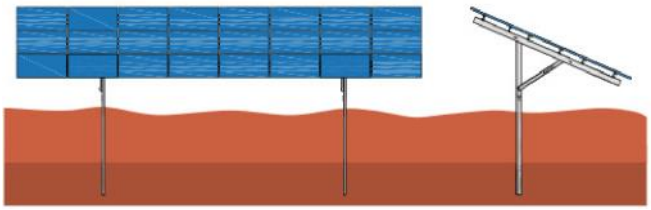
Ground anchoring	Concrete pad, on surface or with micropiles. Metallic ground screw. Direct insertion into the ground.
Compliance to standards	EC, ASCE, AS NZS, CFE, IS NCH, SANS.
Load capacity	Models with durability up to 5.000N/m².
Use of dedicated software for validation of the structure's stability	

LAYOUT OF THE STRUCTURE

SINGLE-PILE

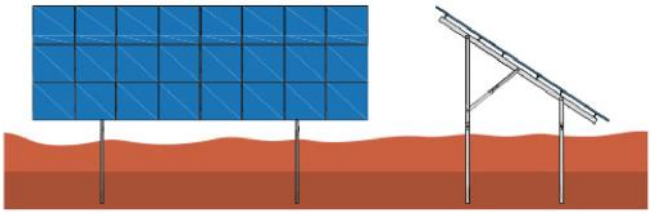


2 panels in vertical layout

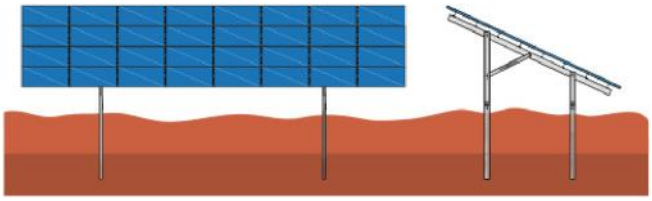


3 panels in horizontal layout

DOUBLE-PILE



3 panels in vertical layout



4 or 6 panels in horizontal layout

ISO 9001:2008

Iso 14001:2004

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