DUAL POLE PV MOUNTING SOLUTION
MINIMIZED AND SIMPLIFIED LOGISTICS

THE MOST COST EFFECTIVE MOUNTING SYSTEM
FOR UTILITY SCALE PV INSTALLATIONS
"Simplicity is the ultimate sophistication"  
Leonardo da Vinci

**UNIQUE DESIGN**

The DP15’s design is based on our accumulated design knowledge and extensive field experience. Every detail has been thoroughly engineered to have the minimum impact on the projected final cost per installed square meter of PV modules and consequently on the levelized cost of energy (LCOE).

**STRONG, YET LIGHTWEIGHT**

95% of the total weight of the structure consists of standardized top-hat or C shaped roll formed profiles. The roll formed profiles are both lightweight and easily manufactured locally (near the installation site) if needed. Since roll forming is a key manufacturing procedure in the steel building construction industry, these profiles can be produced in large volumes with low cost.

The roll formed profiles present an exceptionally high stiffness to weight ratio and with the proper design, this characteristic is inherited to the whole structure. This high stiffness and stability of the structure enables the foundation feet to be 4 m apart, reducing labor and material costs during assembling (compared to the costly narrow spaced foundations).

The structure can be continuous, or repetitions of standardized table lengths (e.g. 40, 42, 44 etc PV modules per table).

**EASY INSTALLATION**

The installation of the DP15 is quick and easy, with optimized functionality in every step of the procedure. There is no need for field work (drilling, cutting, welding, etc) and there is no room left for decisions during the assembling, thus eliminating installation errors and the need for staff expertise.

**HIGH FOUNDATION PLACEMENT TOLERANCE**

The foundation pole protrudes from the ground less than 15 cm. Since the ramming machine’s guiding mechanism is about at the same height, the rammed pole can be installed with maximum precision. Even in difficult soils that don’t allow good foundation precision, the innovative adjustment principle can absorb foundation misplacement up to ±10 cm towards any direction.

**PV MODULE CLAMPING**

Using the G-CLAMP leaves zero gap between PV modules, making DP15, the solution with the best ground coverage ratio. The G-CLAMP also saves labor time, as each module needs less than a minute to be clamped on the tracker. Visit the following link to learn more about the G-CLAMP:  
[www.mechatronenergy.com/3z7q](http://www.mechatronenergy.com/3z7q)

**OUTSTANDING FLEXIBILITY**

A single base design and a single type of clamp can be used to install almost all types of framed panels, independently of the PV module’s outer dimensions.

**ONLY A SINGLE BOLT SIZE IS USED THROUGHOUT THE ASSEMBLY DURING THE INSTALLATION.**
4 DIFFERENT FOUNDATION OPTIONS TO SATISFY THE NEEDS OF ANY PROJECT

1. RAMMED POLE
   One of the most common and cost effective foundation solutions in PV installations.

2. CONCRETE PILE
   A good alternative to the rammed pole foundation.

3. SEMI-BALLAST
   A solution that does not require any special machinery.

4. DIRECT
   Installation on pre-existing structures such as rooftops or concrete yards.

THE G-CLAMP SAVES LABOR TIME, AS EACH MODULE NEEDS LESS THAN A MINUTE TO BE FIXED ON THE STRUCTURE.
FOOT
The foot fixes the structure on the foundation.

Mounting surface length: 20 m to 22.3 m depending on the chosen Variant

WINDBRACES
Simple wind braces lock the structure in place.

SLIDING CONNECTIONS
All the important connections are adjustable. This allows the structure to absorb minor field inconsistencies without disrupting the installation process.

Fixed Inclination 5° to 40° chosen by the installer.

Distance from one foot to the next: 1.85 m ±0.1 m

Front to rear foot distance: 1.85 m ±0.1 m
DP15

SPECIFICATIONS

MAIN CHARACTERISTICS
- Description: Modular, double pole fixed mounting system
- Slope range: 5° to 40°
- Configurations: 40, 42, 44 modules per table
- Distance between foundations along table: 5 m
- Min. distance from ground: 0,5 m
- Max. height: 2,6 m
- Ground coverage ratio: 35% -50%

SAFETY
- Designed to meet all the requirements of Eurocode 3
- Easy to adjust to local national standards

ENVIRONMENTAL CONDITIONS
- Continuous hot-dip galvanized steel or Magnelis steel.
- Bolts: Hot-dip galvanized, or zinc flake protected

INSTALLATION CHARACTERISTICS
- Possible Foundations:
  - rammed pole
  - concrete pile
  - concrete ballasted foundation
  - installation on pre-existing structures (e.g. roof-tops)
- Minimum distance of the PV modules from the ground: 0,45 m
- Ground coverage ratio: 35%-50%

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