



**GVS**  
Solar Irrigation System  
powered by **aes**

*A new irrigation  
paradigm*



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GVS is a **mobile solar irrigation system**, capable of generating all the energy required for sustainable irrigation.

GVS **artificial intelligence** software controls the operation in a comprehensive and **autonomous** way through **Big Data** with field measurement sensors.

It is designed for extensive and intensive agricultural, using pivot and drip irrigation systems.



# Benefits



**Sustainable:** Allows efficient use of natural and economic resources.



**Data-Driven Intelligent:** It provides real-time monitoring (of equipment and agronomic conditions).



**100% Mobile:** It is easy to move, install and manipulate.



**Flexible:** It is complemented to irrigations systems of any brand and model.



**Operation Safety:** High standards of active and passive personal safety.



**Integrated:** A single product integrates different subsystems (data collection, irrigation management and energy self-supply).



**Large Areas Management Adaptability:** GVS can work as a stand alone (100% off-grid) or in a coordinated cluster of interconnected GVS (micro-grid).



**Operation:** Automatic-remote or Manual-local.



**Efficient:** It is designed to transform diesel systems with solar power. It also has the ability to interact with fixed power grids, generator sets or equivalent power generation systems.



**Versatile:** It works with vertical axis pumps, surface pumps or submersible electric pumps.



**Autonomous:** It autonomously manages the generation, storage and usage of energy, making decisions on each of these stages.



**Storage:** It enables to maintain irrigation without interruptions caused by cloudiness and at the same time extend the irrigation period.



**Technical Support and Warranty..**

# Technical Features



Systems:  
**Pivot or Drip Irrigation.**



Irrigation area:  
**Up to 80 ha (200 acres)**  
(Limited by water availability) for each GVS  
(Extensible with GVS clusters)



Maximum pump power  
**60 HP / 44.7 kW.**



Required installation area:  
**90m x 10m / 300 ft x 32 ft.**



Mobile: all equipment is folded in a  
**standard 20 ft** ocean container.



Technology:  
**Siemens** imported from Germany. **SIEMENS**



Installed solar capacity:  
**Up to 85 kWp by GVS.**



Maximum power of the pivot:  
**15 HP / 10 kW.**



Weight:  
**13,500 Kg/29,700 Pounds.**



Battery capacity  
**50 kWh / 512 Vdc.**



It meets International Standard for photovoltaic panels **(including hail resistance).**



Lifespan:  
**25 years.**



Monitored alarm system and IP **security cameras by 4G connection (optional).**



# SUSTAINABILITY



- A new irrigation paradigm.
- Expand the productive frontier taking care of natural resources and the environment.



## About Us

### GVS

GVS is Green Valley Solar, a company dedicated to the generation of innovative products in the interaction between renewable energy and agricultural production. GVS seeks sustainable development through innovation in the efficient use of resources.