

CASE STUDY

Breaking Ground in Solar Safety: Tigo Rapid Shutdown Landmark C&I Installation in Spain

Background

Solventa6, a leader in turnkey solutions specializing in innovation and safety in photovoltaic solutions, recently completed a 371kWp solar installation in Illescas (Toledo, Spain) on an industrial building owned by Mountpark Industrial Logistics Group. This installation is the first in Spain to be equipped with Tigo's dedicated rapid shutdown solution for commercial and industrial (C&I) plants.

Challenges

The customer chose PV to support green energy initiatives and promote sustainability, significantly reducing their environmental impact. Solventa6 proposed a customized solution to lower energy consumption and operational costs, while enhancing the customer's energy independence and decreasing their carbon footprint.

Fire safety compliance was a crucial aspect in designing the system. At the specific request of the industrial unit's insurer, the array required a rapid shutdown solution to secure the installation in emergencies and ensure the safety of first responders and operators.

Solution

Solventa6 selected Tigo's industry leader rapid shutdown technology, and installed Tigo TS4-A-2F devices and RSS Transmitters with Pure Signal Technology, complying with the strictest PV safety requirements. Each TS4-A-2F device works with two PV modules, enabling prompt and streamlined installation. The RSS Transmitter maintains a keep-alive signal with the TS4 units, minimizing signal interference and crosstalk. When the keep-alive signal is no longer detected, voltage is stopped at the module level within 30 seconds, enhancing safety and enabling safe operations in case of an emergency.

Additionally, the compatibility between Tigo's rapid shutdown solutions and the largest network of modules and inverters provided Solventa6 with significant design flexibility and an optimal installation experience.

INSTALLERS

Solventa6

solventa6

INSTALLATION TYPE

Commercial

LOCATION

Spain



FEATURES

Rapid Shutdown



TIGO EQUIPMENT

Tigo TS4-A-2F

RSS Transmitter with Pure Signal Technology



Solventa6 installed **Tigo TS4-A-2F** (see picture in the lower-left box) underneath the PV modules and **RSS Transmitters with Pure Signal technology** with the inverters. The RSS Transmitters maintain a unified keep-alive signal with the rapid shutdown devices on the roof, while minimizing signal interference and crosstalk.

Results

The successful installation of Tigo's technology in this pioneering project not only validates the effectiveness of the rapid shutdown system but also sets an important precedent for future similar projects in Spain.

"We chose the Tigo Rapid Shutdown System due to their strong reputation and extensive technical documentation. Tigo website provides detailed product information and technical specifications, which helped us make an informed decision." said David Cortals, Fire Solutions Specialist at Solventa6. "Moreover, Tigo's reliable customer support instills confidence, ensuring that we have the necessary assistance and resources to implement their solutions effectively."

Equipment summary

- Commercial installation
- System capacity: 371kWp
- PV Modules: 834x modules (252x Risen RSM 40-8-400M, 582x JA Solar JAM72S20-465MR)
- Inverter: 3x Sungrow SG110CX
- 432x Tigo TS4-A-2F (Fire Safety)
- 5x RSS Transmitter with Pure Signal Technology

For more information on **Tigo Rapid Shutdown solutions**, visit: tigoenergy.com/product/ts4-a-2f

For more information on **Solventa6**, visit: solventa6.com

