

Case Study

SOLVATEC

Commercial Rooftop Allschwil



Allschwil, Switzerland



Solar Frontier modules in the interaction with green broken glass fragments on the flat roof of the guide dog school in Allschwil. (Image: Solvatec)

Site Overview

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|----------------------------------|------------------------------|
| Location | Allschwil, Switzerland |
| Coordinates | 47.54° N, 7.53° E |
| Average global irradiance | 1,117 kWh/m ² /yr |
| Average temperature | 9.0 °C, 48.2 °F |
| Average precipitation | 775 mm/yr, 30.5 in/yr |

Technical Overview

| | |
|---------------------------------------|---------------------------------|
| Date onstream | September 2012 |
| System capacity | 152.1 kWp |
| Panel type | SF150-L (150 W) |
| Number of installed panels | 1,014 |
| Tilt angle, orientation | 0°, Flat Rooftop |
| Expected output | 140,000 kWh/yr |
| Total CO₂ reduction | 95,000 kg/yr, 209,437 lbs/yr |
| Inverter | SMA Tripower |

Financing Bank

Private Investment

"The guide dog school building in Allschwil is located close to the forest near the French border and is with its unique architecture a focal point of the region. With the flat installation of CIS modules of Solar Frontier, we could maintain the character of the building's silhouette and set new visual accents in the interaction with the green glass fragments."

Dominik Müller, founder and CEO of Solvatec

The Solvatec AG, based in Basel, Switzerland was founded in 1998 and is a leading company for consulting, planning, marketing and implementation of photovoltaic systems. The experienced team of PV specialists pays special attention to the aesthetic and functional integration of solar installations into overall building structure.

This installation of more than 150 kWp on the rooftop of a guide dog school in the Swiss town of Allschwil, was put into operation in November, 2012. More than 1,000 Solar Frontier CIS thin-film modules were installed on the flat rooftop of the building, which is distinguished by its unique architecture, characterized by its surface covering of shimmering green broken glass fragments. The guide dog school, founded in 1972, is engaged in the training of dogs for the visually impaired. The installation will produce more than 140,000 kWh of electricity per year, with associated CO₂ savings of almost 100 tones, and demonstrates a further step in the positive environmental engagement environment of the guide dog school.

This PV installation on the flat rooftop was a special challenge, since the characteristic of the flat rooftop should be maintained on the one hand and a new architectural accent should be created in the interaction of the modules with the broken glass fragments on the rooftop, on the other hand. The Solar Frontier modules were able to meet both requirements. The good low-light behavior results in good output even on flat rooftops and the black colored modules allow a harmonious integration of the modules into the unique architecture of the building.

About Solar Frontier

Solar Frontier is committed to creating the world's most ecological, economical solar energy solutions. Our proprietary CIS technology (denoting key ingredients copper, indium, and selenium) has the best overall potential to set the world's most enduring standard for solar energy. For more information visit www.solar-frontier.com and www.solar-frontier.eu