

# Case Study

## SOLAGENT

### Commercial Rooftop Neudrossenfeld



The aesthetics of Solar Frontier's CIS modules complemented the design of this indoor riding hall and offer a thin-film technology with high efficiency.

#### Site Overview

Location	Neudrossenfeld, Germany
Coordinates	50.01° N, 11.52° E
Average global irradiance	1,020 kWh/m <sup>2</sup> /yr
Average temperature	7.7 °C, 45.9 °F
Average precipitation	936 mm/yr, 36.9 in/yr

#### Technical Overview

Date onstream	May 2011
System capacity	179.92 kWp
Panel type	SF130-L (130 W)
Number of installed panels	1,384
Tilt angle, orientation	Various
Expected output	143,936 kWh/yr
Total CO <sub>2</sub> reduction	127,200 kg/yr, 280,428 lbs/yr
Inverter	5 x SMA STP 15000 6 x SMA STP 17000

#### Financing Bank

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*"The Solar Frontier modules combine an extremely good price/performance ratio with ease of installation. I doubt that we would have been able to achieve such an accurate set-up with any other module. In addition, the modules' efficiency has impressed me from the beginning. I have installed Solar Frontier modules for the first time, but it certainly won't be the last."*

*Joerg Lauterbach  
General Manager, Solagent GmbH*

Solagent GmbH designs and builds solar installations primarily on rooftops in the Nuremberg region. Each solution Solagent installs is tailored to the specific requirements of its clients.

In this instance, it was decided that the PV modules should be thin-film, not crystalline because of the low tilt angle and the east/west orientation of the rooftop. The company opted in favor of Solar Frontier modules as they have a superior price/performance ratio, a high efficiency and a precise construction. On top of that, the modules could be installed very close to the roof and their aesthetics would complement the riding hall's overall design. Joerg Lauterbach followed the recommendations of his supplier, MHH Solartechnik, to implement Solar Frontier's CIS thin-film modules.

The installation in Neudrossenfeld is implemented on the roof of a brand new indoor riding hall. In total, 1,384 modules were installed, providing 180 kWp of power. The system was split with 130 kWp of modules placed on the west side of the riding hall, and the remaining 50 kWp on the east side. Once the decision in favor of using Solar Frontier's CIS modules had been reached, measuring and planning the system took only one day. The installation itself was rather quick as well: the modules including all cabling were put in place in 2.5 weeks.

#### 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](http://www.solar-frontier.com)