



BERLIN CENTRAL STATION



Solar energy and architecture with **SUNNY BOY 2000**

The central train station in Berlin is a good example demonstrating that photovoltaics can be complementary to state-of-the-art architecture. A system including 780 solar modules with 78,000 transparent, powerful solar cells was installed on the East-West hall roof, integrated into the glass surfaces. It is therefore not only possible to solely generate useful energy but also to still have daylight on all three levels of the station.

Since the hall is located in a curve, all roof elements are different and therefore every solar module has a different size. The single surfaces have a size of 1.7 to 2.6 square meters. The solar plant generates a total of approx. 160,000 kilowatt hours of "clean" electricity per year on a surface of 1,700 square meters. This yield corresponds to 2 % of the station's power consumption.

When the station was officially opened in 2006, the PV plant had already been in operation for three years. Today, it is an essential element of one of the most interesting tourist attractions of modern Berlin.

System size

- 190 kWp
- Modules: Optisol M0611100K

Location

- Berlin, Germany
- Operator: Deutsche Bahn AG
- Planning and Realisation:
gmp - von Gerkan, Marg und
Partner BLS Energieplan GmbH,
Scheuten Solar Technology AG
- Commissioning: 2002

Annual yield

- 160,000 kWh
- CO₂-reduction: 112 t

Inverters

- Sunny Boy 2000

The Heart of every Solar Energy System