



The  
Design  
Solution

Case Study  
Panel: NU-AK300B

## Energy Production in the Heart of the City

Five restaurants and cafés are supplied using the electricity of 210 PV modules

Project: Gothenburg, Sweden  
Installation by: Solenergi Göteborg AB



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## Summary:

- **Scale:** 210 SHARP modules were installed on the roof of a historic building in the heart of Gothenburg.
- **Module:** The SHARP series NU-AK300B stands out due to its high efficiency and the all-black design of the panels.
- **Output:** The modules are producing 63 kW of energy, enough to supply five restaurants and cafes and a conference centre.
- **Proximity to the North Sea:** As Gothenburg is located on the shores of the North Sea, the certification for salt spray resistance provides peace of mind regarding corrosion.

## PV panels

Product:	NU-AK300B
Number of modules:	210
Rated power:	300 W
Cells:	60
Size:	1640x992x35 mm
Efficiency:	18.4%

## Solar power plant

Plant size:	63kW
Roof orientation:	South, West, and East
Roof pitch:	27°

## Other components

Two Huawei SUN 2000 inverters with 36 kW and 20 kW each.

## Savings

The annual electricity cost savings are expected to amount to €8,000.



Gothenburg, Sweden



### **Solenergie Göteborg is SHARP's partner in Gothenburg**

Solenergie Gothenburg has an excellent reputation for installing PV systems in and around Gothenburg and has been a SHARP partner for more than two years.

The customer of this project is Avenygruppen AB, who owns several restaurants in Gothenburg and is planning on opening a hotel in the near future. Five of those restaurants and cafes and one conference establishment are directly benefitting from the PV installation. The 210 modules of the SHARP series NU-AK300B are built on the roof of a historic building in the heart of Gothenburg. The house which was built in 1925 is six stories high and thus has ideal sun irradiation all day as the PV panels are installed facing East, South, and West. The installation on the roof of the historic building was tricky. The system that was ultimately used was Weland mountings, produced in Sweden, for this kind of tin roofs.

### **Saving €8,000 electricity costs annually and reducing the carbon footprint**

Avenygruppen chose to install the SHARP PV panels because of the environmental benefits and financial savings: annual forecasted solar radiation is expected to be 57,000 kWh which equates to annual electricity cost savings of €8,000. The yearly consumption of the whole building is more than 1,000,000 kWh. The city of Gothenburg permitted the installation on the historic building only due to its positive environmental impact.

### **Certified salt mist resistance and unique SHARP warranty**

As Gothenburg is located close to the shore of the North Sea, the salt spray resistance of the modules is the key to longevity and productivity of the modules. The SHARP NU-AK300B modules are certified salt mist resistant. Moreover, SHARP provides a 10-year product guarantee and 25 years of linear performance guarantee on all PV panels.



**The operator says:**

*'We as Aveny-family care deeply about the environment and are very happy to produce our energy sustainably. The whole planning and construction process was smooth and we are very happy with our partners Solenergie Göteborg and SHARP.'*

**Patrik Hermansson,**  
**Avenygruppen**

**The installer says:**

*'The installation of the PV panels on the historic building were a full success despite the difficult mounting conditions. We are very happy with the results and the cooperation with our partner SHARP.'*

**Gunnar Johansson,**  
**Solenergie Göteborg AB**





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