

Optimum use of space with back contact modules

Case Study

Installation: 75382 Alth.-Ottenbronn, Germany

System

System size:	5.12 kWp
Surface area:	26.1 m ²
Roof orientation:	South, 200°
Degree roof pitch:	40°
Installation:	Roof parallel

Modules

Type:	Sharp NQR256A
Number of panels:	20
Maximum power:	256 Wp
Cells:	48
Size:	1318 x 980 x 46 mm
Best in class efficiency:	19.8%

Use of space

With the compact Sharp solar modules NQR256A the roof area around the dormers can be optimally used.

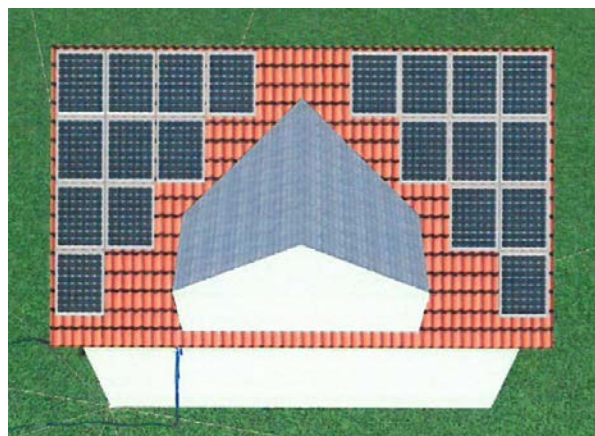


Consumption

Power consumption:	7,000 kWh / year
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Yield

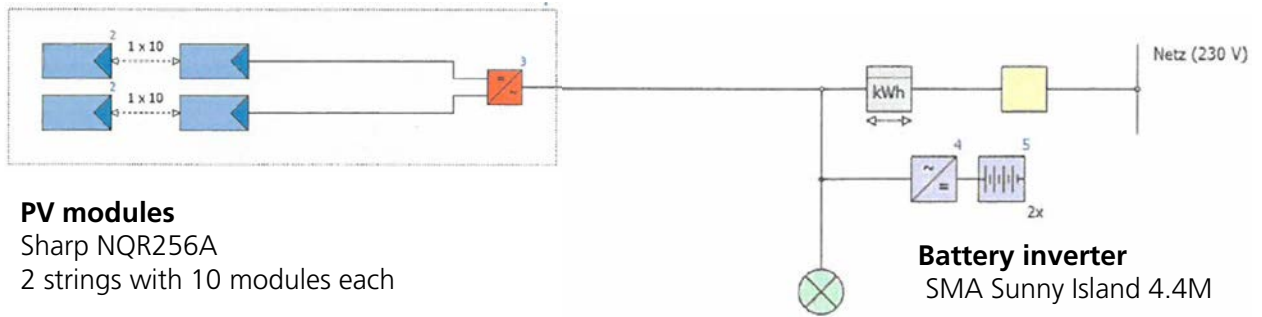
PV generator power:	4,937 kWh / year
Private consumption:	3,634 kWh / year
Grid feed:	1,303 kWh / year
Specific annual yield:	964.23 kWh / kWp
Private consumption (%):	73.6%
Shading losses:	3.1 % / year
CO ₂ emissions avoided :	2,860 kg / year



Components:

PV inverter

SMA Sunny Island Tripower
5000TL-20



PV modules

Sharp NQR256A
2 strings with 10 modules each

Battery inverter

SMA Sunny Island 4.4M

Battery

LG Chem Resu 6.5
5,5 kWh usable

The installer says

„We have been using solar modules from Sharp for some time. For this installation the compact 48-cell modules from Sharp were the ideal solution. Despite the dormer we were thus able to use the available roof area well. The customer can now achieve a maximum profit.“

Martin Walz Elektro + Solartechnik GmbH & Co. KG

