SEYBOLD
PV-SYSTEME GmbH

Solar power for fabric buildings

Module layout & yield overview

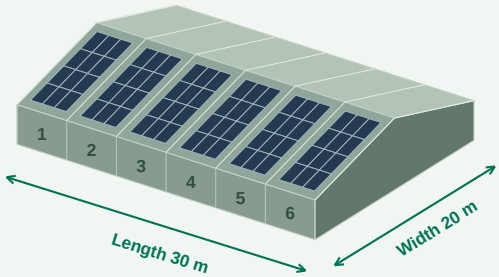
Example: 20 m wide × 30 m long

72 solar modules · 40.3 kWp

≈ 38,300 kWh solar power per year

≈ €7,350 annual electricity cost savings

One roof side covered



Annual yield by building size

Each cell: module count · system capacity · annual solar generation · electricity cost savings

Building length	15 m width	20 m width	25 m width
15 m	**27 modules** 15.1 kWp 14,400 kWh/year **2,760 €/year**	**36 modules** 20.2 kWp 19,200 kWh/year **3,680 €/year**	**45 modules** 25.2 kWp 23,900 kWh/year **4,600 €/year**
20 m	**36 modules** 20.2 kWp 19,200 kWh/year **3,680 €/year**	**48 modules** 26.9 kWp 25,500 kWh/year **4,900 €/year**	**60 modules** 33.6 kWp 31,900 kWh/year **6,130 €/year**
25 m	**45 modules** 25.2 kWp 23,900 kWh/year **4,600 €/year**	**60 modules** 33.6 kWp 31,900 kWh/year **6,130 €/year**	**75 modules** 42.0 kWp 39,900 kWh/year **7,660 €/year**
30 m	**54 modules** 30.2 kWp 28,700 kWh/year **5,520 €/year**	**72 modules** 40.3 kWp 38,300 kWh/year **7,350 €/year**	**90 modules** 50.4 kWp 47,900 kWh/year **9,190 €/year**
35 m	**63 modules** 35.3 kWp 33,500 kWh/year **6,440 €/year**	**84 modules** 47.0 kWp 44,700 kWh/year **8,580 €/year**	**105 modules** 58.8 kWp 55,900 kWh/year **10,730 €/year**
40 m	**72 modules** 40.3 kWp 38,300 kWh/year **7,350 €/year**	**96 modules** 53.8 kWp 51,100 kWh/year **9,810 €/year**	**120 modules** 67.2 kWp 63,800 kWh/year **12,260 €/year**

Calculation assumptions

One roof side: 5 m of building length per bay; 9 / 12 / 15 modules per bay for 15 / 20 / 25 m building width. Each module has 560 Wp. Values are rounded.

Yield: 950 kWh/kWp per year as a conservative guide for Cologne, 18° roof pitch, south-facing (±20°). PVGIS (standard module, free-standing, 14% losses): approx. 978–988 kWh/kWp.

Savings: annual yield × 80% self-consumption × €0.24/kWh net; excludes feed-in revenue. €0.24/kWh: rounded Destatis H1 2026 value for 20–500 MWh/year (excluding VAT and deductible taxes).

Indicative only: location, orientation, shading and load profile affect actual results. 80% self-consumption is an assumption; investment, operating and finance costs are excluded.

Sources: PVGIS / European Commission (SARAH3 2005–2023) · Destatis, non-households, H1 2026.

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