







UrbanPV

Decentralized PV Power Generation and Use

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UrbanPV | Decentralized PV power generation in urban environments

Advantages:

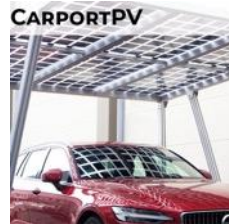

-  very low-priced power generation (0.03 €) close to the point of consumption
-  direct use often without expensive lines and transformers
-  batteries as back-up enable a high degree of self-use
-  protection against blackouts and other disruptions

➤ **The GridParity concepts are directly realizable and economically attractive!**

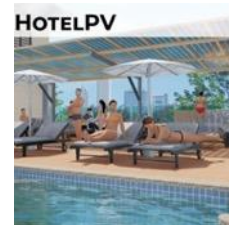
UrbanPV | we have workable solutions




Housing



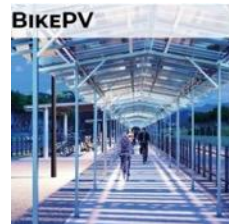
Industry & Business



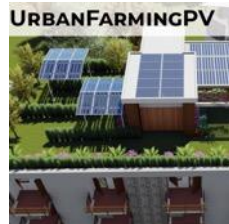

Sports & Recreation



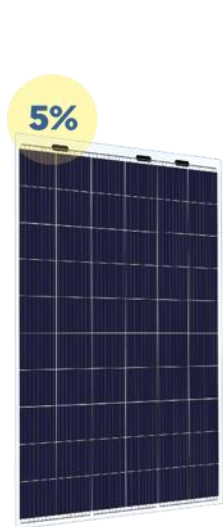
Traffic



Vegetation

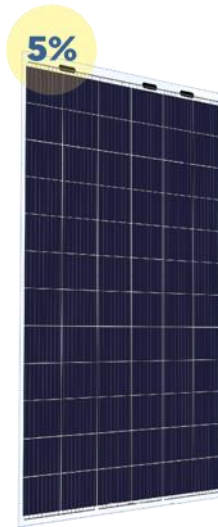


Agora PV Modules | Proudly Made in Slovakia



B60 (330 W_p)

Art.Nr: M2633
Doppelglas Modul mit M3 bif. Zellen
1684 x 1002 x 5 mm



B72 (400 W_p)

Art.Nr: M2740
Doppelglas Modul mit M3 bif. Zellen
2000 x 1002 x 5 mm



B40 (250 W_p)

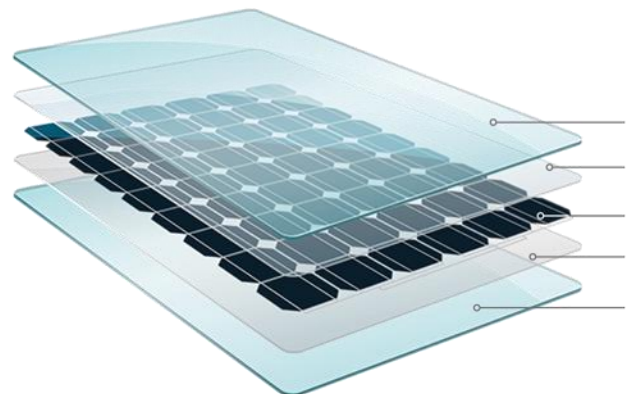
Art.Nr: M2325
Doppelglas Modul mit M6 bif. Zellen
1684 x 1002 x 5 mm



B40/10 (305 W_p)

Art.Nr: M7430
Doppelglas Modul mit M10 bif. Zellen
2105 x 1043 x 5 mm

Many more modules at : <https://www.gridparityag.com/module>



Extremely stable:

- < 2 mm tempered solar glass
- POE (polyolefin encapsulant)
- Solar cell
- POE (polyolefin encapsulant)
- < 2 mm tempered solar glass



GridParity makes the difference!

over **60°C**

below **30°C**

+

Vehicle and people are protected from hail, snow and heavy rain



Case Study | Carparks at recreation areas



- **Heat reduction** through double-glazed modules and carport kits
- **Aesthetics** for parking areas too: Bright halls instead of dark caves
- Investment costs approx. €1,650 per kWp

Case Study PV-Parking in Germany

PV Parking in Germany	Plettenberg	Soest
Installed capacity [kWp]	303	210
Investment [€]	499.950	346.500
Yield [kWh p.a.]	287.850	220.500
Price self consumption (0,25€)	71.963	55.125
Payback Period [years]	6,9	6,3

Design Carport |

TURVE®



- Particularly suitable for **high-speed parking** and high-traffic parking lots
- **Curved** steel supports
- **Bifacial** double-glazed modules
- **Tested statics**
- **Optimized center of gravity** with impact protection
- **High-quality** materials
- **Snow and wind load:** up to 120 kg/m²
- available in **custom colors**



Case Study | PoolPV: PV Solution for recreation area



- **Limited use in hot weather:** Swimming pools, especially paddling pools and children's pools, can only be used to a limited extent on extremely hot summer days.
- **High energy consumption:** pools consume large amounts of energy.
- **Rising energy costs:** Until now, energy, especially gas, has been available at low cost for swimming pools, but prices are rising.

PoolPV	Cost/ performance	Yield kWh p.a.	Yield € p.a.*
Costs pent roof children's pool	23.000 €		
Connected load B72/6	22,5 kWp	24.150 kWh	4.830 €
Transparent modules	15,0 kWp	15.750 kWh	3.150 €
Costs gable roof (6xBP5)	37.000 €		
Connected load B72/6	27,0 kWp	28.350	5.670 €

Case Study | Climate protection and Electricity for Public and Commercial Areas



OfficePV	Cost/ performance	Yield kWh p.a.	Yield € p.a.*
Cost shaded alley	23.000 €		
Total Yield full power	60 kWp	63,000 kWh	15,000 €
Transparent modules	36 kWp	38,000 kWh	9,000 €
Investment	99.000 €		
Payback period years	Full power: 6.6	Transparent: 11	

Case Study | Shading and Electricity for Public and Commercial Areas!



Simple profitability calculation	L	XL	XXL
Electricity yield after simulation PV Syst.	1.100 kWh/kWp	1.100 kWh/kWp	1.100 kWh/kWp
Total annual yield	534 MWh	682 MWh	713 MWh
Profitability calculation (payback) with constant yield 25 years			
Annual yield when using own electricity 0.15 €/kWh	80.100 €	102.300 €	106.950 €
Payback	8,7 Jahre	7,5 Jahre	7,3 Jahre



Case Study | SchoolPV: Protection & Education



SchoolPV	Cost/ performance	Yield kWh p.a.	Yield € p.a.*
A. Cost shaded alley	23.000 €		
Total Yield full power	15 kWp	15,800 kWh	3,950 €
B. Green Classroom	19 kWp	20,000 kWh	5,000 €
Investment	40.000 €		
Payback period years	A. Alley: 5,8	B. Classroom: 8	



Case Study | PV Solutions for Industrial Roofs

Case Study Industrial Roof Installation

Waste Recycling s.r.o.	Myto	Havlikov Brod
Installed capacity [kWp]	240	430
Investment [€] (800€/kWp)	192.000	344.000
Yield [kWh p.a.]	212.400	380.550
Price self consumption (0,17€)	36.108	64.694
Payback Period [years]	5,3	5,3





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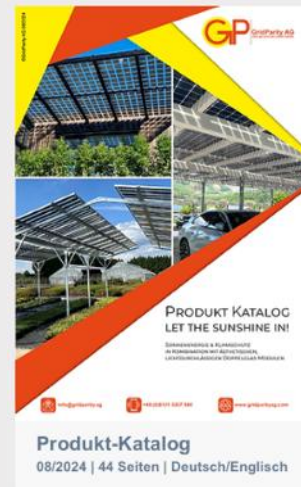
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