

# PV CARPORTS FROM THE MARKET LEADER FOR TRANSPARENT PV ROOFS

ATTRACTIVE SOLUTIONS FOR PARKING AREAS - WITHOUT CONCRETE FOUNDATIONS

CERTIFIED DOUBLE GLASS MODULES IN ACCORDING TO EN12600 FOR OVERHEAD INSTALLATION



**20**<sup>★</sup>  
YEARS  
WARRANTY



Engineered  
in Germany

MADE IN  
EUROPE

02/2024

**GRID  
PARITY**  
next generation photovoltaic  
[www.gridparity.ag](http://www.gridparity.ag)

# PV CARPORTS ENABLE CLIMATE RESILIENCE AND DE-CENTRALIZED POWER GENERATION

## **GridParity presents new concept for bright PV parking spaces**

Parking lot PV has many advantages: Areas that have already been approved and sealed can be used twice. On the one hand, the canopy offers protection from the sun and weather, and on the other, it produces electricity, e.g. for heat pumps and charging stations on site - electricity that can be used on site and does not have to be transported over long distances and new lines.

## **Enormous potential of more than 50 gigawatts**

The potential for parking lot PV is enormous. Calculations by the Fraunhofer Institute for Solar Energy Systems (ISE) have shown that almost a quarter of the PV installation capacity targeted in Germany by 2030 can be implemented in parking lots. The analysis was based on OpenStreetMap data. The scientists calculated a potential of approx. 40 million parking spaces for the 48.5 million cars in Germany. Only a tiny fraction of these are equipped with PV carports.

## **Forward-looking models are in demand:**

One reason for the untapped potential is that the concepts offered on the market are predominantly small-scale in structure and cannot compete with roof or open spaces in terms of construction costs. Industrially manufactured systems with an attractive cost-benefit ratio are required to achieve low costs and to build on large areas. In addition, solid collision protection (at least 50 kN) with correspondingly stable supports must be demonstrated.

## **Attractive bright parking**

A decisive factor in the attractiveness of the new development is the light character of the carports thanks to the absence of a closed sheet steel cover. GridParity makes this possible by using semi-transparent double-glazed modules with overhead approval and watertight installation. The solutions developed are characterized by functional aesthetics, low production costs and short construction times, and the design is convincing. Entry widths of up to 7 m without supports are provided even in the basic version with an external clearance height of approx. 3.5 m. By extending the supports, parking spaces can be created for mobile homes and small trucks.



# WE KNOW WHAT MAKES A SOLAR CARPORT UNIQUE...



Designed as **single carports, multiple carports and carport systems**

**Foundations without excavator destruction and complete, simple dismantling**

**Translucent double-glazed modules: „let the sunshine in!“ in various degrees of transparency to choose from**

**Waterproof module installation without 2nd roof skin**

**Extremely stable steel pillars** with different heights (also for motorhomes / trucks)

**Modularly expandable** and adaptable to different parking areas. The columns can be moved variably in width thanks to the beam

**High stability: snow loads >5400 Pa & wind loads >2400 Pa**

**Integrated LED lighting** (optional)

**Easy assembly** with short construction time (self-assembly possible with detailed assembly instructions)

**Easy entry & exit**

Entrance width per parking space: 5, 6 or 7 m, depth: 5 or 6 m, for all types of vehicles

Extremely **lightweight constructions**, per parking space e.g.: - Wood: only approx. 210 kg, steel: approx. 260 kg - Modules: approx. 160 kg

100% recyclable materials **„cradle to cradle“ with a small CO2 footprint**

Hi-Tech **„Designed in Germany“**



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# MATERIAL QUALITY



WE ONLY USE HIGH-QUALITY, POLLUTANT-TESTED BUILDING MATERIALS. OUR WOOD IS OBTAINED EXCLUSIVELY FROM SUSTAINABLE FORESTRY. FOR US, THIS ALSO MEANS THAT WE PLANT 100 TREES FOR EVERY BUILDING KIT.

The entire production chain is monitored internally and externally in accordance with strict quality standards. GridParity AG is certified to **ISO9001** and **ISO14001**. In addition, all kits can be dismantled. This means they can be reused elsewhere or recycled - in line with the „**cradle to cradle**“ principle.



# PROCESSING

OUR PV SYSTEMS ARE PLANNED, TESTED AND INSTALLED IN ACCORDANCE WITH GERMAN STANDARDS. GRID-PARITY IS THE MARKET LEADER FOR TRANSPARENT PV ROOFS WITH OVER 500 SYSTEMS.



# SIMPLE ASSEMBLY

NUMBERED PARTS, MILLED GROOVES FOR WOODEN PROFILES AND INTELLIGENT CONNECTING PARTS MAKE ASSEMBLY EASY!



# COLOR

The wooden beams (glued laminated timber - glulam) are primed in the factory and painted in the desired color (3 coats). If necessary, the beams can be repainted during assembly (paint included)

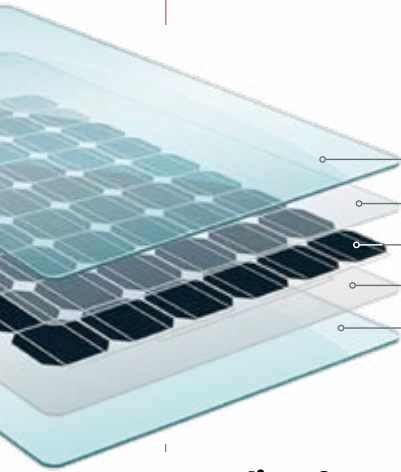
Art.Nr.: FH 11 12 13 15 17

white    transp.    pine    beech    teak



# PREMIUM MODULES

**2mm tempered solar glass with extremely resistant anti-reflective coating**



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



## Outstanding features of our modules

- Slim module design - Ultra-thin - Ultralight
- Highly transparent double-glazed design
- Excellent wind / snow load properties
- Resistant to environmental influences
- Self-cleaning or easy cleaning
- Microcrack-free
- Extreme fire resistance
- Superior low-light performance
- Extended warranty: 30-year performance guarantee
- Positive power tolerance (plus sorting)
- PID free



# CONSTRUCTION WITHOUT DESTRUCTION



Small openings instead of large excavation holes



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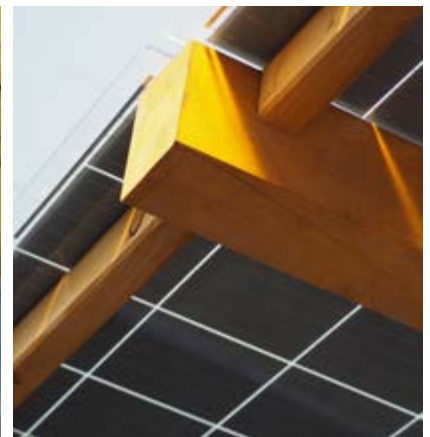
# SERIES H

INDIVIDUAL CARPORTS MADE OF GLULAM (GLUED LAMINATED TIMBER) ON GALVANIZED COLUMNS MADE OF SPECIAL STEEL

20<sup>★</sup>  
YEARS  
WARRANTY



Wood is a renewable raw material and is therefore ideal for combining with double-glazed PV modules. The high-quality glued laminated timber (glulam) that we use for the upper structure of the carport systems is characterized, among other things, by its high stability and load-bearing capacity, so that the modules can be safely installed on the structure.



Wood is primed in the factory and painted in the desired color. It should be re-painted during assembly (paint included in the scope of delivery)

Art.Nr.: FH

11

white

12

transp.

13

pine

15

beech

17

teak



Kit with marked positions. Quick and easy assembly. Multiple wood protection

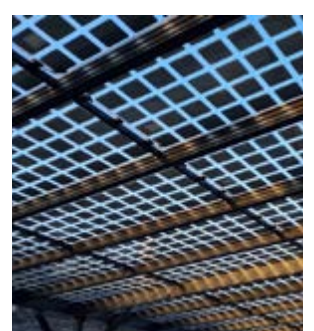
# SERIES A

INDIVIDUAL CARPORTS MADE OF ANODIZED ALUMINIUM  
ON GALVANIZED COLUMNS MADE OF SPECIAL STEEL

20<sup>★</sup>  
YEARS  
WARRANTY



Intelligent connecting parts allow the profiles to be inserted into each other and screwed tightly together. The optionally available dark antracite color of the profiles gives the carport a modern look and perfectly complements architectural buildings.



# SERIES S

STEEL SUPERSTRUCTURE MADE OF GALVANIZED STEEL  
ON GALVANIZED COLUMNS MADE OF SPECIAL STEEL

currently not available

20<sup>★</sup>  
YEARS  
WARRANTY



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# CONSTRUCTION

CAN BE EXTENDED AS REQUIRED



Without destroying the parking area with concrete foundations





# PARKING LOTS

FOR COMMUTERS AND E-CHARGING AREAS



Due to the PV obligation, parking lots must be covered with PV systems. It is therefore no longer enough to simply asphalt brownfield sites and divide them into parking bays. In addition, the requirements of electromobility mean that more planning effort is required, e.g. because power lines have to be laid. If you consider the use of a commuter parking lot, it makes sense to integrate small supply units such as a kiosk with a range of drinks and newspapers so that waiting times for visitors can be bridged more comfortably. There could also be a variable use of the valuable covered traffic areas, with the holding of different markets (e.g. also a (children's) flea market on Sundays). Even pop-up sports areas, e.g. for yoga or badminton, are conceivable.



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# DESIGNS FOR ANY PARKING SPACE

Free preliminary planning  
and design with budget  
price calculation

PLANNING SERVICE INCLUDED.

Basic structural analysis included - individual structural documentation at an extra charge.



ATTRACTIVE SOLUTIONS FOR EVERY PARKING SPACE



# STABLE FOUNDATION

Short construction time  
without blocking and de-  
stroying the parking area

The fear of many investors is the closure of parking spaces for months on end, combined with a massive drop in customer frequency. This is unavoidable with conventional concrete block foundations (see following examples).



GridParity offers optimized foundation solutions that avoid these massive and disruptive concrete structures:

## Option 1: Screw anchor as foundation

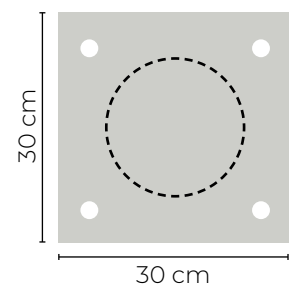
The approx. 2m long foundation bolts are screwed into the ground using special machines. The base plates welded to the supports are then connected to the extremely stable retaining plates (20 mm steel thickness) of the foundation bolts. This means that only a few paving stones need to be removed from the existing parking area.

**ADVANTAGE:** During the entire construction period, the parking areas can be used largely without restriction.



## Option 2:

Create a steel-reinforced concrete foundation measuring approx. 60 x 60 cm\* or  $\varnothing$  600 mm with a depth of 80 cm. Allow the foundation to harden completely. Now place the supports centrally on the finished foundation points and align them straight. Then screw the supports to the concrete foundation at the intended points using concrete dowels.



Column diameter:  
**Column 16:**  $\varnothing$  16 cm

\* larger foundations may be statically necessary in exceptional cases.



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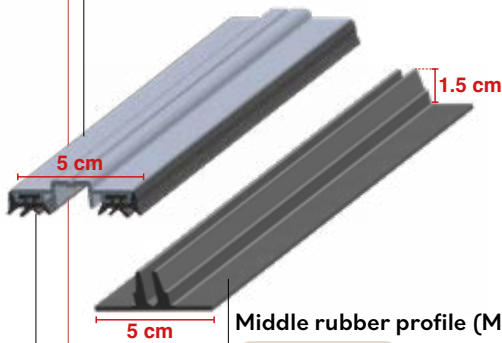
# WATER-RESISTANT MOUNTING

Thanks to our unique module fastening

Middle profile (M) for long module side

Art.Nr: Z1006

with integrated rubber lips



Middle rubber profile (M-G)

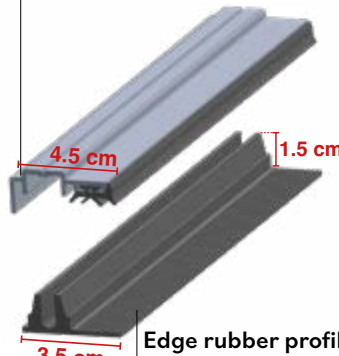
Art.Nr: Z1001

lies under the long module sides

Edge profile (R) for long module side

Art.Nr: Z1008

with integrated rubber lips



Edge rubber profile (R-G)

Art.Nr: Z1003

lies under the long module sides

DachDicht

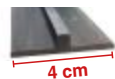
Art.Nr: Z7000

Sealing compound



Rubber sealing profile (D)

Art.Nr: Z1004



for unimpeded water drainage on the narrow side of the module

Flat rubber (F)

Art.Nr: Z1005



for the outer edges of the module narrow sides



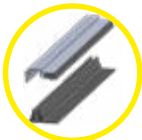
Art.Nr: Z1002

Inserted rubber lip (E) in M- and R-profiles

Sealing material set for size 1 modules (Art.Nr.: Z1100)  
Sealing material set for size 2 modules (Art.Nr.: Z1200)

(Z1009)

(Z1007)



(Z1005)



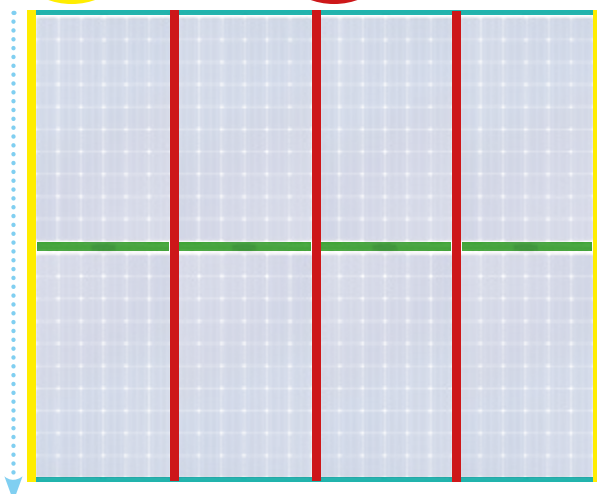
(Z1004)



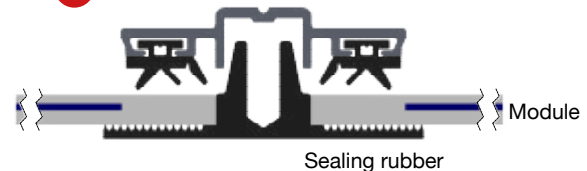
(Z7000)



Water flow direction



Z1007 Aluminum middle profile



**Note on water-resistant module installation:**

Waterproof or water-resistant means that moisture is kept out, but cannot be completely excluded. As the water resistance depends crucially on the quality of the installation of our fixing profiles in accordance with our installation instructions, we cannot guarantee that they are watertight. Please also note that our profiles are a very inexpensive sealing solution. The system cannot be compared with the sealing of conservatories, for example, for which completely different standards apply. Our carports and patios are open systems where temperature differences mean that condensation (like on any car windshield) and wind-driven water droplets cannot be avoided.

# MODULE OVERVIEW



CERTIFIED DOUBLE GLASS MODULES IN ACCORDING TO EN12600 FOR OVERHEAD INSTALLATION



## Modules for variant V1

## Modules for variant V2, V3 & V4



	<b>B60</b>	<b>B72</b>	<b>B45</b>	<b>B60/6</b>	<b>B72/6</b>	<b>B40/10</b>
Maximum power (Pmax)	330 W	400 W	275 W	370 W	450 W	305 W
Optimum operating voltage (Vmp)	33.8 V	40.6 V	27.5 V	36.9 V	44.5 V	23.1 V
Optimum operating current (Imp)	9.77 A	9.86 A	10.0 A	10.03 A	10.11 A	13.2 A
Open circuit voltage (Voc)	41.2 V	49.3 V	31.6 V	42.2 V	50.8 V	27.1 V
Short-circuit current (Isc)	10.19 A	10.37 A	10.28 A	11.25 A	11.29 A	13.72 A
Maximum system voltage	1500 V DC (IEC)	1500 V DC (IEC)	1500 V DC (IEC)	1500 V DC (IEC)	1500 V DC (IEC)	1500 V DC (IEC)
Operating temperature	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
Max. permissible series protection	20 A	20 A	20A	20 A	20 A	20 A
Power tolerance	0 ~ +5 W	0 ~ +5 W	0 ~ +5 W	0 ~ +5 W	0 ~ +5 W	0 ~ +5 W
<b>Dimensions [mm], ca.</b>	<b>1684 x 1002 x 5</b>	<b>2000 x 1002 x 5</b>	<b>2000 x 1002 x 5</b>	<b>1765 x 1043 x 5</b>	<b>2105 x 1043 x 5</b>	<b>2105 x 1043 x 5</b>
Transparency, ca.	5%	5%	35%	5%	5%	40%

## Our module production



### Ultra-modern module factory in Slovakia

high-quality double-glazed modules and frame modules have been produced to the latest standards at our AGORA factory in Slovakia since May 2023.



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# ASSEMBLY

in a few days



# BOUNDLESS

WITH 4 VARIANTS.

ALL BASIC KITS CAN BE EXTENDED IN LENGTH WITHOUT LIMIT.

**Drive-in widths: Standard 5m and 6m / special dimensions 3m, 4m and 7m**



**V1**

(Depth ca. 5,1 / 6,1m)



**V2**

(Depth ca. 5,4 / 6,4m)



**V3**

(Depth ca. 10,6 / 12,6m)



**V4**

(Depth ca. 10,6 / 12,6m)

Optimum use of space with stable construction. A total of 4 cars fit under one carport combination. The standard design can be individually extended so that the parking space can be optimally utilized.

## Variant 1 & 2: Single and row carport



## Variant 3: Saddle roof carport



## Variante 4: Pitched roof carport

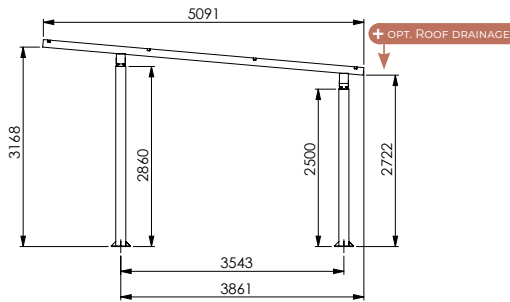


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# VERSATILE



## Variant 1: Carport (for Module: B60 & B72)



Column height: 2500mm & 2860mm

\* Optional sheet metal cladding, which includes the cost of connecting two carports and roof drainage.

Available with the following entry widths approx:

	3,1 m (Depth: 5,1m)	4,1 m (Depth: 5,1m)	5,1 m (Depth: 5,1m)	6,1 m (Depth: 5,1m)	7,1 m (Depth: 5,1m)
Base (B60)	(H1331) incl. 9 x B60 & fixing	(H1431) incl. 12 x B60 & fixing	(H1531) incl. 15 x B60 & fixing	(H1631) incl. 18 x B60 & fixing	(H1731) incl. 21 x B60 & fixing
Ext. (B60)	(H1391) incl. 9 x B60 & fixing	(H1491) incl. 12 x B60 & fixing	(H1591) incl. 15 x B60 & fixing	(H1691) incl. 18 x B60 & fixing	(H1791) incl. 21 x M60 & fixing
opt. tin*			(ZH001)	(ZH003)	(ZH005)

	V1 L-1 (2,9kW)	V1 XL-1 (3,8kW)	V1 XXL-1 (4,8kW)	V1 3XL-1 (5,8kW)	V1 4XL-1 (6,7kW)
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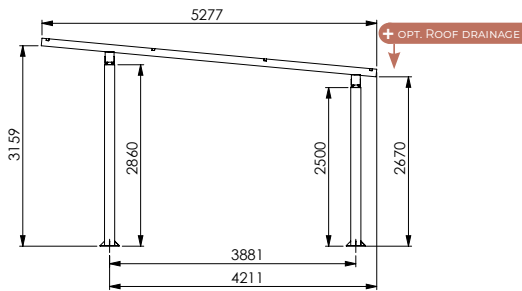
Available with the following entry widths approx:

	3,1 m (Depth: 6,1m)	4,1 m (Depth: 6,1m)	5,1 m (Depth: 6,1m)	6,1 m (Depth: 6,1m)	7,1 m (Depth: 6,1m)
Base (B72)	(H1342) incl. 9 x B72 & fixing	(H1442) incl. 12 x B72 & fixing	(H1542) incl. 15 x B72 & fixing	(H1642) incl. 18 x B72 & fixing	(H1742) incl. 21 x B72 & fixing
Ext. (B72)	(H1392) incl. 9 x B72 & fixing	(H1492) incl. 12 x B72 & fixing	(H1592) incl. 15 x B72 & fixing	(H1692) incl. 18 x B72 & fixing	(H1792) incl. 21 x B72 & fixing
opt. tin*			(ZH002)	(ZH004)	(ZH006)

	V1 L-2 (3,4kW)	V1 XL-2 (4,6kW)	V1 XXL-2 (5,7kW)	V1 3XL-2 (6,8kW)	V1 4XL-2 (8,0kW)
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## Variant 2: Carport (for Module: B60/6 & B72/6)

Bifacial



Column height: 2500mm & 2860mm

\* Optional sheet metal cladding, which includes the cost of connecting two carports and roof drainage.

Available with the following entry widths approx:

	3,2 m (Depth: 5,4m)	4,2 m (Depth: 5,4m)	5,3 m (Depth: 5,4m)	6,4 m (Depth: 5,4m)	7,4 m (Depth: 5,4m)
Base (B60/6)	(H1333) incl. 9 x B60/6 & fixing	(H1433) incl. 12 x B60/6 & fixing	(H1533) incl. 15 x B60/6 & fixing	(H1633) incl. 18 x B60/6 & fixing	(H1733) incl. 21 x B60/6 & fixing
Ext. (B60/6)	(H1393) incl. 9 x B60/6 & fixing	(H1493) incl. 12 x B60/6 & fixing	(H1593) incl. 15 x B60/6 & fixing	(H1693) incl. 18 x B60/6 & fixing	(H1793) incl. 21 x B60/6 & fixing
opt. tin*			(ZH001)	(ZH003)	(ZH005)

	V2 L-1/6 (3,3kW)	V2 XL-1/6 (4,4kW)	V2 XXL-1/6 (5,6kW)	V2 3XL-1/6 (6,7kW)	V2 4XL-1/6 (7,8kW)
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Available with the following entry widths approx:

	3,2 m (Depth: 6,4m)	4,2 m (Depth: 6,4m)	5,3 m (Depth: 6,4m)	6,4 m (Depth: 6,4m)	7,4 m (Depth: 6,4m)
Base (B72/6)	(H1314) incl. 9 x B72/6 & fixing	(H1414) incl. 12 x B72/6 & fixing	(H1514) incl. 15 x B72/6 & fixing	(H1614) incl. 18 x B72/6 & fixing	(H1714) incl. 21 x B72/6 & fixing
Ext. (B72/6)	(H1394) incl. 9 x B72/6 & fixing	(H1494) incl. 12 x B72/6 & fixing	(H1594) incl. 15 x B72/6 & fixing	(H1694) incl. 18 x B72/6 & fixing	(H1794) incl. 21 x B72/6 & fixing
opt. tin*			(ZH002)	(ZH004)	(ZH006)

	V2 L-2/6 (4,1kW)	V2 XL-2/6 (5,4kW)	V2 XXL-2/6 (6,8kW)	V2 3XL-2/6 (8,1kW)	V2 4XL-2/6 (9,5kW)
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### Variant 3: Saddle roof double carport (for Module: B60/6 & B72/6)

**Bifacial**

V3 L-1/6  
(6,7kW)

V3 XL-1/6  
(8,9kW)

standard  
width: 2.5m

Parking lot overwidth:  
3m 3,5m

V3 XXL-1/6  
(11,1kW)

V3 3XL-1/6  
(13,3kW)

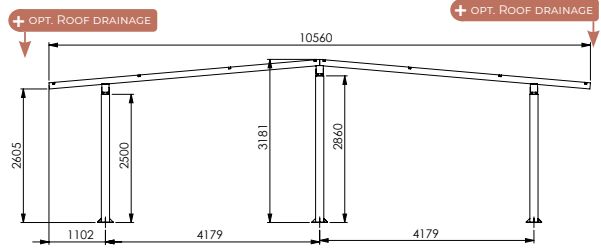
V3 4XL-1/6  
(15,5kW)



Base: 6 Columns  
Extension: 3 Columns

Available with the following entry widths approx:

	3,2 m (Depth:10,6m)	4,2 m (Depth:10,6m)	5,3 m (Depth:10,6m)	6,4 m (Depth:10,6m)	7,4 m (Depth:10,6m)
Base (B60/6)	(H5313) incl. 18 x B60/6 & fixing	(H5413) incl. 24 x B60/6 & fixing	(H5513) incl. 30 x B60/6 & fixing	(H5613) incl. 36 x B60/6 & fixing	(H5713) incl. 42 x B60/6 & fixing
Ext. (B60/6)	(H5393) incl. 18 x B60/6 & fixing	(H5493) incl. 24 x B60/6 & fixing	(H5593) incl. 30 x B60/6 & fixing	(H5693) incl. 36 x B60/6 & fixing	(H5793) incl. 42 x B60/6 & fixing



Column height: 2500mm & 2860mm

	V3 L-2/6 (8,1kW)	V3 XL-2/6 (10,8kW)	V3 XXL-2/6 (13,5kW)	V3 3XL-2/6 (16,2kW)	V3 4XL-2/6 (18,9kW)
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Available with the following entry widths approx:

	3,2 m (Depth:12,6m)	4,2 m (Depth:2,6m)	5,3 m (Depth:12,6m)	6,4 m (Depth:12,6m)	7,4 m (Depth:12,6m)
Base (B72/6)	(H5314) incl. 18 x B72/6 & fixing	(H5414) incl. 24 x B72/6 & fixing	(H5514) incl. 30 x B72/6 & fixing	(H5614) incl. 36 x B72/6 & fixing	(H5714) incl. 42 x B72/6 & fixing
Ext. (B72/6)	(H5394) incl. 18 x B72/6 & fixing	(H5494) incl. 24 x B72/6 & fixing	(H5594) incl. 30 x B72/6 & fixing	(H5694) incl. 36 x B72/6 & fixing	(H5794) incl. 42 x B72/6 & fixing

### Variant 4: Pitched roof double carport (for Module: B72/6)

**Bifacial**

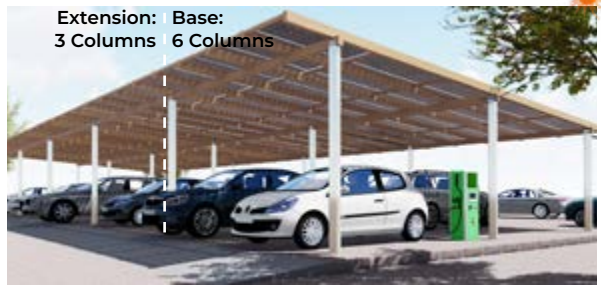
V4 L-1/6  
(6,8kW)

V4 XL-1/6  
(9,0kW)

V4 XXL-1/6  
(11,3kW)

V4 3XL-1/6  
(13,5kW)

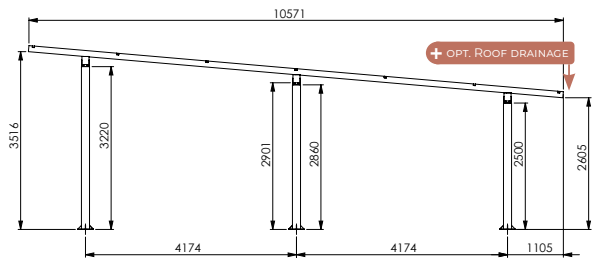
V4 4XL-1/6  
(15,8kW)



Extension: 3 Columns  
Base: 6 Columns

Available with the following entry widths approx:

	3,2 m (Depth:10,6m)	4,2 m (Depth:10,6m)	5,3 m (Depth:10,6m)	6,4 m (Depth:10,6m)	7,4 m (Depth:10,6m)
Base (B72/6)	(H6313) incl. 15 x B72/6 & fixing	(H6413) incl. 20 x B72/6 & fixing	(H6513) incl. 25 x B72/6 & fixing	(H6613) incl. 30 x B72/6 & fixing	(H6713) incl. 35 x B72/6 & fixing
Ext. (B72/6)	(H6393) incl. 15 x B72/6 & fixing	(H6493) incl. 20 x B72/6 & fixing	(H6593) incl. 25 x B72/6 & fixing	(H6693) incl. 30 x B72/6 & fixing	(H6793) incl. 35 x B72/6 & fixing



Column height: 2500mm & 2860mm

	V4 L-2/6 (8,1kW)	V4 XL-2/6 (10,8kW)	V4 XXL-2/6 (13,5kW)	V4 3XL-2/6 (16,2kW)	V4 4XL-2/6 (18,9kW)
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Available with the following entry widths approx:

	3,2 m (Depth:12,6m)	4,2 m (Depth:2,6m)	5,3 m (Depth:12,6m)	6,4 m (Depth:12,6m)	7,4 m (Depth:12,6m)
Base (B72/6)	(H6314) incl. 18 x B72/6 & fixing	(H6414) incl. 24 x B72/6 & fixing	(H6514) incl. 30 x B72/6 & fixing	(H6614) incl. 36 x B72/6 & fixing	(H6714) incl. 42 x B72/6 & fixing
Ext. (B72/6)	(H6394) incl. 18 x B72/6 & fixing	(H6494) incl. 24 x B72/6 & fixing	(H6594) incl. 30 x B72/6 & fixing	(H6694) incl. 36 x B72/6 & fixing	(H6794) incl. 42 x B72/6 & fixing

### Shade roof / Bikeport

(for Module: B60/6 & B72/6)

**Bifacial**



	BP4-1 (2,6kW)	BP5-1 (3,2kW)	BP6-1 (3,8kW)
Width	4,2 m (Depth: 3,4m)	5,3 m (Depth: 3,4m)	6,4 m (Depth: 3,4m)
Base (B60/6)	(H0513) incl. 8 x B60/6 & fixing	(H0613) incl. 10 x B60/6 & fixing	(H0713) incl. 12 x B60/6 & fixing
Ext. (B60/6)	(H0593) incl. 8 x B60/6 & fixing	(H0693) incl. 10 x B60/6 & fixing	(H0793) incl. 12 x B60/6 & fixing

	BP4-2 (1,8kW)	BP5-2 (2,3kW)	BP6-2 (2,7kW)
Width	4,2 m (Depth: 2,1m)	5,3 m (Depth: 2,1m)	6,4 m (Depth: 2,1m)
Base (B72/6)	(H0512) incl. 4 x B72/6 & fixing	(H0612) incl. 5 x B72/6 & fixing	(H0712) incl. 6 x B72/6 & fixing
Ext. (B72/6)	(H0592) incl. 4 x B72/6 & fixing	(H0692) incl. 5 x B72/6 & fixing	(H0792) incl. 6 x B72/6 & fixing

	BP4-4 (3,6kW)	BP5-4 (4,5kW)	BP6-4 (5,4kW)
Width	4,2 m (Depth: 4,2m)	5,3 m (Depth: 4,2m)	6,4 m (Depth: 4,2m)
Base (B72/6)	(H0514) incl. 8x B72/6 & fixing	(H0614) incl. 10 x B72/6 & fixing	(H0714) incl. 12x B72/6 & fixing
Ext. (B72/6)	(H0594) incl. 8x B72/6 & fixing	(H0694) incl. 10x B72/6 & fixing	(H0794) incl. 12x B72/6 & fixing



CERTIFIED DOUBLE GLASS MODULES IN ACCORDING TO EN12600 FOR OVERHEAD INSTALLATION



# PV CARPORTS

FROM THE MARKET LEADER FOR TRANSPARENT PV ROOFS

## Why a PV carport from GridParity?

Electricity from 6 cent/kWh

- Vehicle protection and electricity yield
- Upgrading existing parking areas: Climate protection & power generation
- Decentralized energy supply through on-site solar self-consumption from 6 cents/kWh
- 100% recyclability of the materials to be used
- Small CO<sub>2</sub> footprint by saving raw materials during production and construction
- Foundations without destroying the parking area!
- Transparent double-glazed modules for bright parking areas
- High stability: snow loads >5400 Pa and wind loads >2400 Pa.
- Easy entry and exit
- Hi-Tech „Made in Germany“ with a 20-year guarantee

**Drive-in widths: Standard 5m and 6m / special dimensions 3m, 4m and 7m**



**V1**

(Depth ca. 5,1 / 6,1m)



**V2**

(Depth ca. 5,4 / 6,4m)



**V3**

(Depth ca. 10,6 / 12,6m)



**V4**

(Depth ca. 10,6 / 12,6m)



# CO<sub>2</sub> FOOTPRINT

- NOT A MARGINAL PROBLEM



Unlike rooftop systems, for example, PV carports involve the use of considerable resources for construction work. These determine the CO<sub>2</sub> footprint. In the usual calculations, however, this is disregarded and the CO<sub>2</sub> savings from the electricity yield are highlighted unilaterally. As part of a study, various PV carport concepts and their CO<sub>2</sub> emissions were rated for

- Fundaments,
- Roof skin and
- Construction services

This showed that the use of solid concrete blocks for the foundations and the material weight of the substructure (including the roof cladding) have a major impact on CO<sub>2</sub> emissions.

**CO<sub>2</sub> footprint for GridParity PV carports with double glass modules**

**CO<sub>2</sub> footprint for competitor products with concrete foundations**

The following calculation of the CO<sub>2</sub> footprint is based on assumptions. As far as we are aware, this is the first attempt to evaluate the consumption of resources in addition to the yield side. a detailed modeling of the concept is to be carried out as part of a scientific paper. The CO<sub>2</sub> consumption of the materials used was multiplied by the corresponding values for CO<sub>2</sub> emissions as the basis for the evaluation. since the foundation and assembly of the carports also differ fundamentally, an evaluation was also carried out for this.

CO <sub>2</sub> footprint for PV Carports			
	A: GridParity XXL-H1	B: Supplier S	C: Supplier T
<b>Foundation</b>	Screw technology	Betonblock	Betonblock
<b>Pillars</b>	Optimized steel tube	V-Stützen Stahl	V-Stützen Stahl
<b>Construction</b>	Wood from sustainable sources	Stahlprofile	Stahlprofile
<b>Roof skin</b>	none (double glass modules)	Stahlblech	Stahlblech
<b>Modules</b>	Double glass without frame	Single glass with aluminum frame	Single glass with aluminum frame
<b>Foundation construction and assembly</b>	No civil engineering, kits assembled on site	Civil engineering, complete assembly assembled on site	Civil engineering, complete assembly assembled on site
<b>Rating*</b>	<b>2,6</b>	<b>8,8</b>	<b>7,9</b>

\*Scale from 1-10 according to CO<sub>2</sub> emissions



Engineered  
in Germany

# MEGA TREND: URBAN PV

CLIMATE RESISTANCE & POWER GENERATION



The GridParity PV kits can be optimally integrated into modern urban planning. They enhance the cityscape visually and energetically and provide shaded and protected areas. more at: [www.gridparityag.com/urbanpv](http://www.gridparityag.com/urbanpv)

## Climate protection and power generation: Ideally combined

Our concepts are an almost ideal solution not only for carports, but also wherever protection from extreme weather conditions is important: in kindergartens, schools and outdoor swimming pools where children can no longer be exposed to the sun on hot days, in public places that are no longer used in extreme heat or heavy rain, weekly markets where goods spoil very quickly without protection - the list gets longer and longer with every tenth of a degree of global warming. Our concepts are financed by the electricity yield in just a few years!

**Request a non-binding quote!**

Find out more about GridParity's extensive range and take a look at other product catalogs at [www.gridparityag.com/download](http://www.gridparityag.com/download)



GridParity products are all about sustainability: we give a recycling guarantee on all kits („cradle to cradle“), GridParity has been awarded the ISO14001:2015 environmental certificate, we make sure that our logistics partners ship our goods in a climate-neutral way and, as our customer, you can also actively contribute to climate protection with a joint reforestation project!



**GridParity AG - next generation photovoltaic**

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