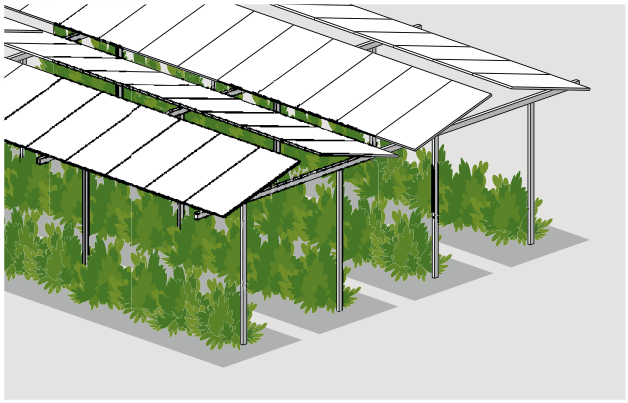
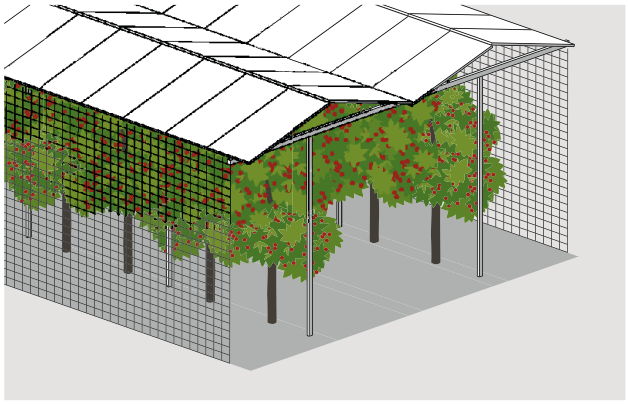
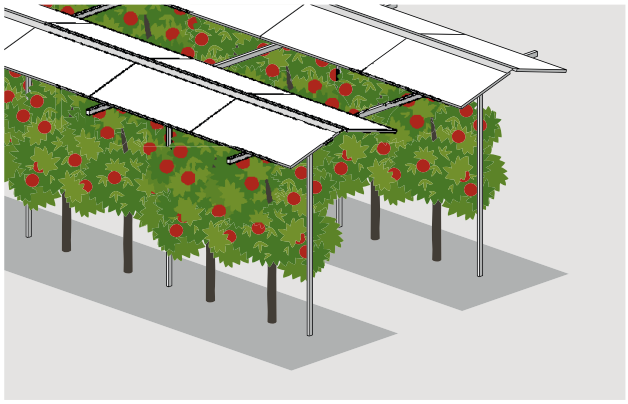
APPLICATIONS

Modules over posts, south or east-west orientation

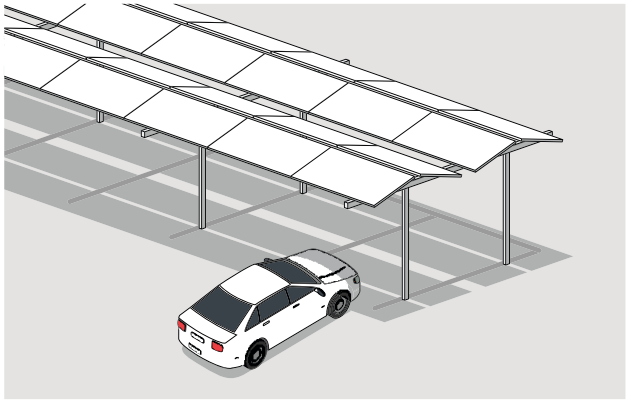


Ridge over posts, east-west orientation





Car park roofing / carport



ALLOWS DOUBLE USE OF GROUND

GMS® DOUBLE

MKG GÖBEL

THE BENEFITS AT A GLANCE

- **Double use of the ground**

Distances between posts of 3 to 5 metres (depending on the modules), 2 to 4 metres of clear headroom: There is a lot of space under the GMS® DOUBLE system, which can be used in many different ways.

- **Complies with DIN SPEC 91434**

GMS® DOUBLE fulfills the requirements of DIN SPEC 91434: a maximum area loss of 10 %; height of at least 2.1 m. The agricultural yield must reach at least 66% of the reference yield. Light availability and water distribution can be adapted to the individual needs of the respective crop using semi-transparent modules and rainwater collection and irrigation systems.

- **Structural crop protection**

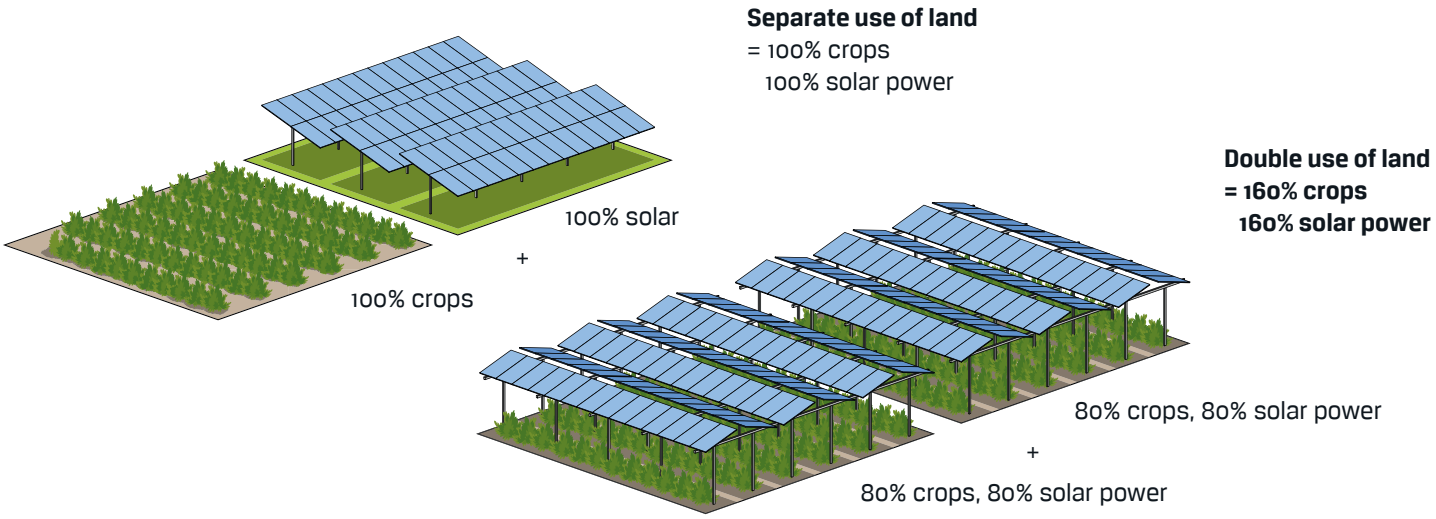
For agricultural use (Agri-PV), the roof protects against weather extremes (heavy rain, hail, excessive sunlight). GMS® DOUBLE can thus replace foil tunnels or greenhouses. Even watertight roofing is possible.

- **Control of the light conditions**

With an east-west orientation, the light moves across the ground during the course of the day. The quantity of transmitted sunlight can be regulated by module row spacing, and can be further increased with semi-transparent modules.

- **Profitable electricity yield curve**

When aligned east-west, GMS® DOUBLE allows longer electricity production on summer days than south-facing systems. The daily yield curve is wider and flatter, the midday peak less pronounced.



Source: Fraunhofer ISE, Freiburg
Illustration: MKG GÖBEL

MAIN COMPONENTS

1 POSTS

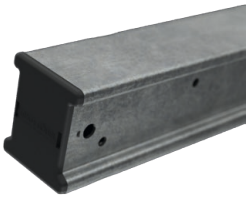
Corrosion-resistant C-profiles offer maximum flexibility for the most diverse ground conditions.

2 SUPPORTS

Stable construction holds the modules at the desired tilt angle.

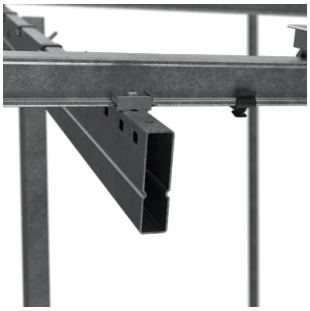
3 LONG BEAM

The closed long beam made from steel provides stability and stepless fastening options.



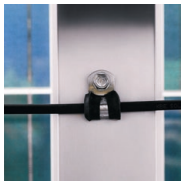
4 MAIN BEAM

Optimised main beams made from steel with zinc-magnesium coating.



ACCESSORIES

Cable tray made from UV-stabilised polymer for cable routing along the long beam



Cable clamps to secure the module cables to the module carrier

Bridging strap for potential equalisation within the table rows

Optional earthing pins for potential equalisation of the modules from below

String inverter / string combiner box (SCB)

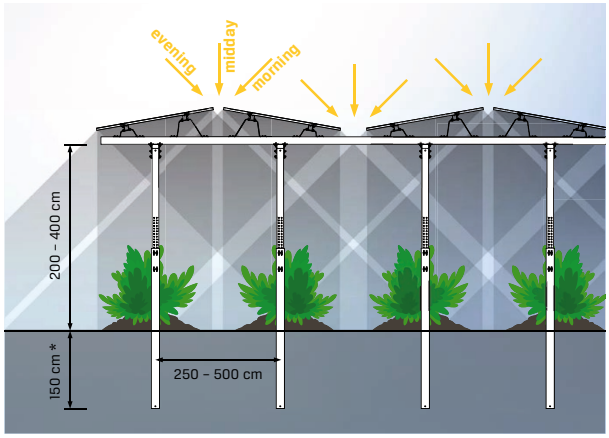
Bite-protection cage made from double bar mesh

End caps

Mowing protection

TECHNICAL DATA

SYSTEM	GMS® DOUBLE
CONSTRUCTION	• Modular system, optimised for raised design • Split posts for height compensation, adaptable to the terrain • Sloping terrain up to 5% (higher on request)
MATERIAL	• Posts: hot-dip galvanised steel (batch galvanised – EN ISO 1461, alternatively zinc-magnesium) • Profiles, stands: galvanised steel (batch galvanised – EN ISO 1461, alternatively zinc-magnesium) • Small parts: aluminium EN AW 6063 T66
FOUNDATION	Rammed posts, concrete foundation or drill holes (in rocky ground)
STATIC CALCULATION	Project-specific in accordance with Eurocode DIN EN 1991, DIN EN 1993, DIN EN 1999, wind tunnel test, CC2, load return period 50 years
MODULE ORIENTATION	1 module vertically, 1 module horizontally
ANGLE OF INCLINATION	Standard: 12° (other angles on request)
LIGHT TRANSMISSION	0 – 90 % (project-specific)



* varies according to ground conditions

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Certified in accordance with DIN EN ISO 9001:2015

Workplace-protection certified ISO 45001:2018 and SCC

TQ CERT CE

SICHERHEITS CERTIFIKAT CONTRAKTOREN