AS FLEXIBLE AS YOUR IMAGINATION

ABOUT DAS ENERGY

DAS Energy is a green technology company specializing in flexible, lightweight photovoltaic solutions.

We offer our customers:

- Innovative photovoltaic products
- Scalable production and flexible solutions
- Close collaboration and joint research & development

THE COMPANY

DAS Energy GmbH, with its headquarters in Wiener Neustadt (Austria), specializes in the research & development and manufacturing of flexible photovoltaic modules. DAS Energy and its products are geared to both product dealers and project developers.

MANAGEMENT

Christian Dries
Sole shareholder & CEO

Benjamin Reddmann
Business Development

Paul Zoglauer
COO

Robert Neumann
CTO

© DHP Technologies

OUR PRODUCTS

DAS Energy combines fiberglass materials from aircraft construction with crystalline silicon solar cells. With this unique development, the company has sought specialization in the manufacturing of flexible, ultra-lightweight photovoltaic modules.

PATENTED DESIGN

The patented design of our modules guarantees their long-term durability and performance.

ULTRA-LIGHTWEIGHT

Module weight as low as 2.5 kg per square meter.

FLEXIBILITY

Their flexibility ensures that the DAS Energy modules conform to the corresponding substructure.

EASILY MOUNTED WITH A NUMBER OF ASSEMBLY OPTIONS

The DAS Energy modules can be glued, screwed, riveted, or mounted onto the substructure using magnets or existing eyelets or holes.

EXTREME WEATHER CONDITIONS

Suitable for extreme weather conditions. Even in heat, sandstorms, and dusty conditions, their performance is not compromised.

CUSTOMER-SPECIFIC AND PROJECT-SPECIFIC SOLUTIONS

Model size, shape, and color are customizable. The junction box is either mounted on the front or on the rear side of the module.

HIGHER ENERGY YIELD

The surface texture of the modules induces a light coupling or light trapping effect. This effect ensures increased electrical efficiency and thus a higher energy yield.

HIGH RELIABILITY

IEC 61730 | IEC 61215

IEC 62804-1 Potential-induced degradation

IEC 61701 Salt mist corrosion

IEC 62716 Ammonia corrosion

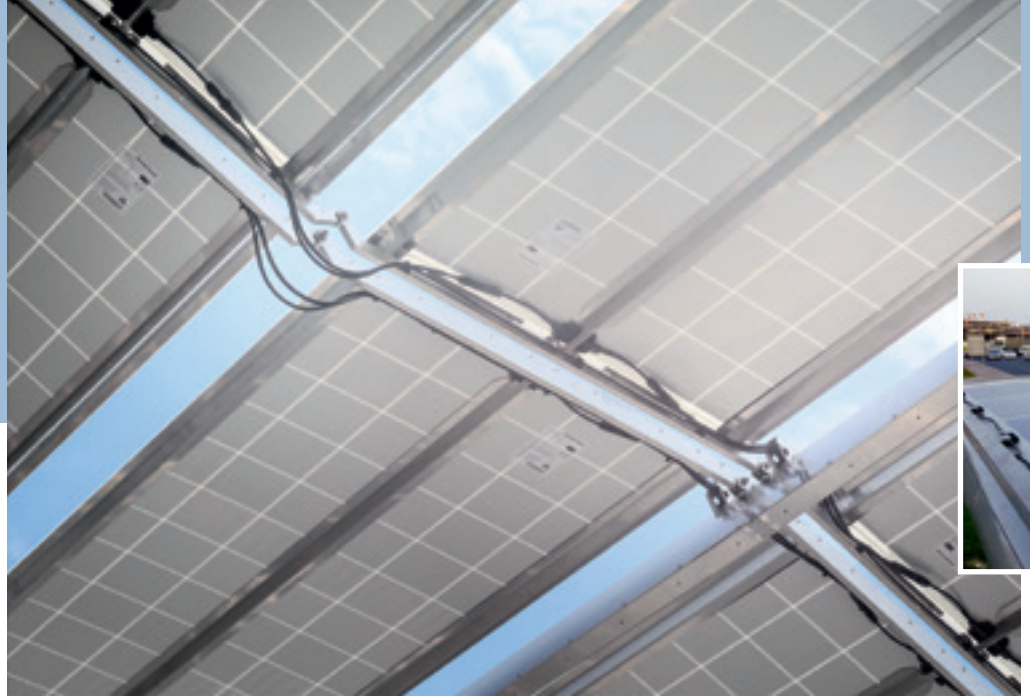
EN 13501-5 B_{ROOF} (t1) "Flying sparks test"

THE FLEXIBLE MODULE

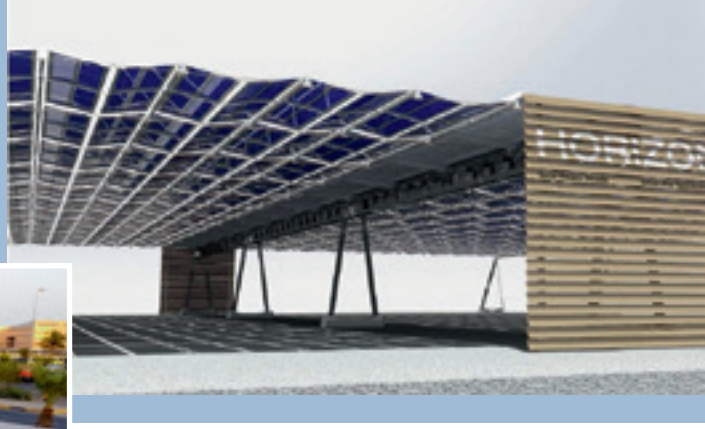
DAS Energy supplies modules in any size, up to the 72-cell high-performance module: *glass-free, flexible and extremely lightweight.*

During assembly, the modules can be adapted to the on-site requirements. They are either glued, riveted, screwed, or mounted onto the substructure using magnets or existing eyelets or holes. This keeps the weight of the photovoltaic systems extremely low and ensures that they can be mounted even onto roofs or facades with difficult structural or physical conditions.

Due to their patented surface texture, DAS Energy modules are not totally smooth. The resulting anti-glare effect makes them ideal for installation on roofs and facade surfaces that should neither be shiny nor reflect light or sun, e.g. in the vicinity of airports.

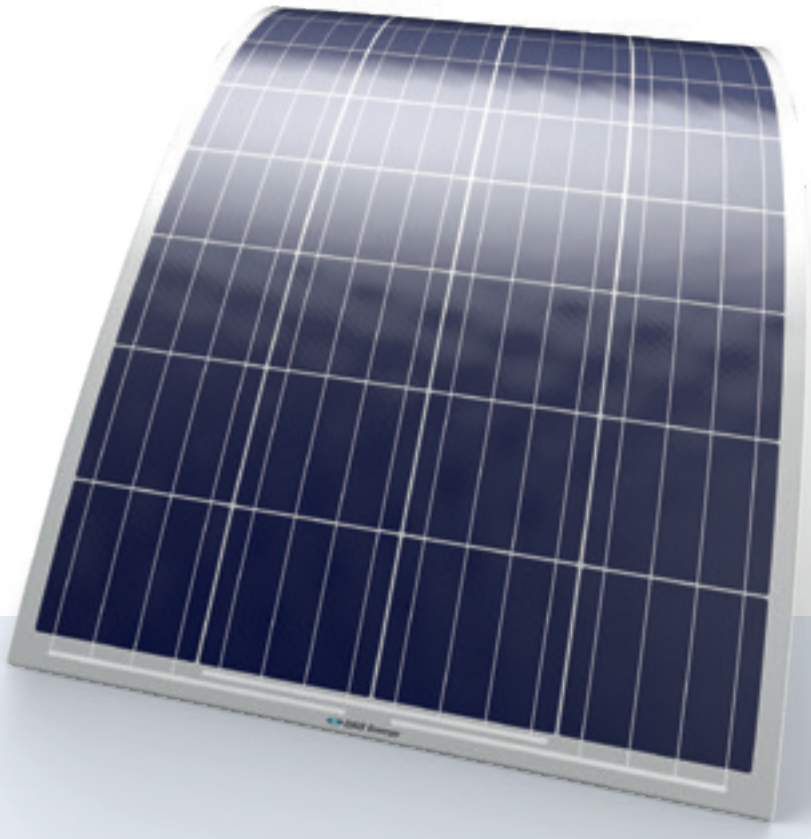


© DHP Technologies



CUSTOM-BUILT SOLUTIONS

The DAS Energy modules can be custom-built to meet all customer´s requirements. Model size, cell type, cell color, laminate color, module form, etc. are all customizable. Ideal solutions are attained together with the customer in order to meet every requirement. Commitment to customer goals is a key priority at DAS Energy.



ARCHITECTURE AND BUILDING

Building-integrated photovoltaics (BIPV)

Building-integrated photovoltaics is a rapidly growing and – due to its requirements in terms of architecture, construction physics, and construction – a highly challenging sector for module manufacturers. The DAS Energy flexible modules are pushing the boundaries of conventional photovoltaics by being simultaneously a building material and a source of renewable power. DAS Energy has risen to the challenge of combining both aesthetics and functionality, and now offers a wide range of solutions.

Building-applied photovoltaics (BAPV)

For existing buildings, the use of building-applied photovoltaics is an ideal opportunity to go green. Structural and physical challenges do not constitute as a hurdle for DAS Energy – thanks to the lightweight design and flexibility of the modules. They are suitable for all roof types (bitumen-covered roofs, slanted or flat roofs …). Easy and versatile applications are additional features of the DAS Energy modules.

OUTDOOR AND MOBILE APPLICATIONS

Implementation of modules on caravans, camper vans, boats, tents, containers, electric vehicles and the like can be a tight fit. Here the flexible, lightweight modules of DAS Energy come into play. Their size and form conforms to all individual conditions.

DAS Energy has developed a solar solution specifically designed for the use with almost any golf cart on the market. The lightweight, thin, and flexible yet rugged construction of the solar panel allows you to attach (as well as detach and reattach) the product to the existing golfcart roof with minimal installation effort.

© Energy 3000 Solar

© Solarwave

PLACE CONTAINER, FOLD OUT SOLAR MODULES, PRODUCE RENEWABLE ENERGY.

The solar container is ready to generate electricity after just a few hours of installation time. The solar modules are able to produce renewable energy between 24 and 80 kWp. It can generate electricity to supply up to 250 households.

Highly efficient lithium-based batteries and modern inverters are conveniently built in and ready for use, so that even at times without sunshine, or in the evening, electricity can be provided.

Within a short time it is possible to store all components securley inside the solar container. This protects all components from bad weather, vandalism, or theft.

For quick and easy powering of:

- mining industry exploration camps
- off-grid villages and settlements
- off-grid schools, hospitals, etc.
- desaster repair / relief
- easily customizable for other deployments
- services in desert areas such as telecom, pumping stations, etc.

.

Capacity options:

Generator output	
40-foot container, generator output	36 – 80 kWp
20-foot container, generator output	24 – 40 kWp
Storage capacity	20 – 90 kWh
AC output	single phase 110 - 120 VAC
	single phase 230 - 240 VAC
	three phase 400 VAC

THE LIGHTEST AND SIMPLEST SOLAR GOLF CART SOLUTION.

DAS Energy has developed a solar solution specifically designed for the use with almost any golf cart on the market. The lightweight, thin, and flexible yet rugged construction of the solar panel allows you to attach (as well as detach and reattach) the product to the existing golf roof with minimal effort. Ideal for any golfer looking for a highly efficient and aesthetically-pleasing source of clean power.

Product benefits at a glance:

- Durable and robust patented PV module using fiberglass-reinforced plastic.
- Cart range extension up to 25%.
- Battery life extended up up to two years compared to a regular golf cart.
- Easy installation on the existing roof without the need of any special tools.
- Savings of up to 20% in yearly electricity costs.
- Environmentally-friendly ~80 kg CO_2 emission reduction per year.
- Custom size and shapes possible.
- DAS Energy quality guarantee – glass-free, flexible, stable and lightweight.

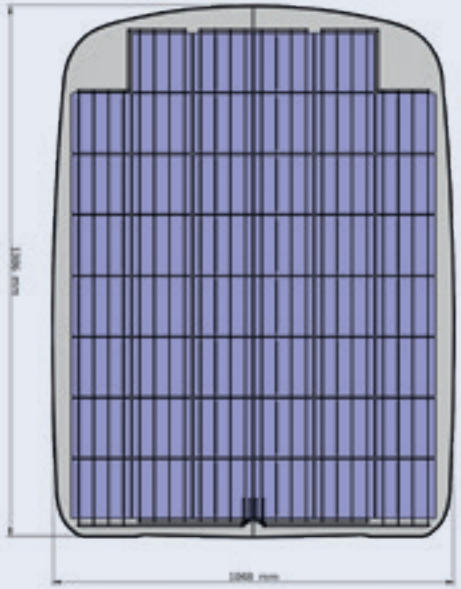
THE MOST EFFICIENT AND ELEGANT WAY TO GOLF GREEN.

The benefits of a DAS Energy solar roof extend further than the added value of being green, as it increases the driving distance by a quarter while preserving the health of the battery. Our customers can expect to use their golf cart battery on average two years longer than solar-less golf carts, all while yearly saving up to 20 percent in charging costs. An addition, the golf cart module can be customized to the client's exact shape and size to fit the specification of any golf cart.

Typical technical specification:

(e.g. compatible with Club Car Precedent i3)

- Power (MPP) 215 Wp
- Voc 29.66 V
- Vmp 24.93 V
- Isc 9.11 A
- Imp 8.74 A
- Battery types 48 VDC lead acid, 48 VDC lithium
- MPPT charge controller (high speed tracking) included in the system
- Extremely low self-consumption



DAS Energy GmbH

Ferdinand Graf von Zeppelin-Strasse 18 | 2700 Wiener Neustadt, Austria

Phone +43 2622 35035 | office@das-energy.com | www.das-energy.com

---