SOLARC











COMPANY PROFILE

SOLARC - First Class Solar Technology!

SOLARC develops, produces and distributes high-quality, high-technology and innovative low-power photovoltaic devices. Our products and services range from simple solar components to complete industrial or consumer products.

Apart from our own standard products (solar modules, solar charge regulators, DC/DC converters) we also offer custom designed developments and are doing this reliably for more than 15 years. SOLARC has gained very fast recognition as a key player in very specific fields of the PV-solar market: solar autarkic and mobile solutions.

We are the right address for those companies seeking an experienced partner to develop and manufacture components for a solar power supply to their product or even a complete new solar-powered solution. SOLARC provides complete support, from the first design steps, to the prototype, to the final serial run.

SOLARC concentrates on 5 major product categories



Customised solar modules



Solar charge controllers and DC/DC converters



Solar measuring instruments



Customised new product development



Consumer products

SOLAR MODULES

Customised solar modules

SOLARC is a supplier of high-quality customised solar modules in diverse shapes and setups (cell technology, sealing, outdoor specifications, etc.).



- We offer high-quality customised solar modules in various shapes
- Flexible or rigid, indoor and outdoor, mono-Si, multi-Si, a-Si or CIGS (cells from different manufacturers)
- Glass or ETFE laminated
- For BIPV/EIPV applications (shutters, parking meters, sensors, wearable electronics etc.)
- With and without frame
- Our diverse standard and customised solar modules vary from 40mW to 200W





BIPV applications Customised form (shutters)





Housing integrated



Micro modules

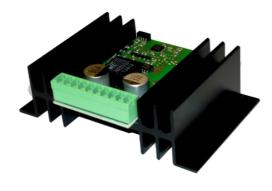


Wearable electronics

ELECTRONICS

Specific for low-power solar off-grid systems

SOLARC develops and manufactures hi-tech, hi-efficiency innovative electronics and energy management systems, especially designed for low-power solar off-grid systems.



- DC/DC converters
- Solar charge controllers
 - Featuring a MPP tracker
 - Adjustable output parameters
 - Very low stand-by consumption
 - · Optional with LED driver
- Programmable lighting-control units
- Programmable motor control units
- Open assembly or in a housing
- We offer customised solar charge controllers and complete new electronics development from prototype to final serial run as well as offering different types of LiFePO4 batteries



Open assembly MPPT controller



DCC LED charge controller



Integrated DC/DC converter



Solar charge controller in a housing



Different types of LiFePO4 batteries

INSTRUMENTS

Irradiance measuring handset with software

MacSolar is a passive sensor for instant and long-term measuring of irradiance and temperature. 3 versions available: **MacSolar**, **MacSolar** E and **MacSolar Sensor**. Evaluation of the measured data using **MacView 2.0** software possible.



Read out process with MacView 2.0

MacSolar with datalogger

- Fully autark
- Calibration: IEC904/3 (certificate in option)

MacSolar E

- Without datalogger

MacSolar Sensor

- Analogue sensor, also available as OEM

MacView 2.0 software

- With over 25.000 solar modules and over 3.000 inverter database
- Assistant to calculate a yield projection with intuitive user interface

Reference Cell

- Irradiation and temperature values are accuratelly registered through the highly sensitive sensor
- Evaluation of the measured data using the software refView possible



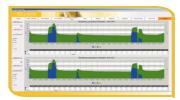
MacSolar E



Sensor



Reference Cell



MacView 2.0 project comparison

NEW DEVELOPMENT

Customised new product development

SOLARC is specialised in the complete development of low-power solar products for other companies, from the prototype to the serial run. SOLARC falls back thereby on long-lasting cooperation with renowned partners in other industrial fields (plastic and metall processing, software, etc.).

Some examples of recent developments are:



GPS-SOLAR®

- Tracking system for mobile objects implementing GPS/GSM-UMTS technology
- GPS navigation for sprinkle irrigation
 - Intelligent charging control (100% self-sufficient)
 - Tracking App (web interface)
 - Modular architecture

CarSolar

 Solar charger for a vehicle's starter battery

Charge regulator with

Motor control units

Solar charger for Li-ion batteries



GPS-SOLAR®



Raindancer®



Charge regulator with motor control unit



Wearable electronics



Rapid prototyping

ROMEG M 20 G

Laser based measurement of the rotor geometry

Dynamic Geometry Measurement (DGM) is a method for the verification of the aerodynamic condition and the aero-elastic behaviour of a wind turbine rotor and the turbine itself.

DGM is a laser-based simultaneous distance measuring method at two profile-sections of the blades. Measurements are taken during turbine operation in order to be able to assess the asymmetries of the rotor and their negative impact on system loads by evaluating the axial movement of the tower.



The measuring process is carried out on turbine in operation:

- No yield losses during measurement
- Measurement takes place under real conditions
- Fast measuring process
- Results are immediately available

A well balanced rotor results in:

- Better performance
- Higher availability
- Longer service-life of all components



Angular differences at root section



Angular differences at tip section



Axial tower oscillation



Tower clearance



Twist angle



Glogauer Straße 21 D-10999 Berlin

EU VAT ld no.: DE812379737

Commercial Register: 67006 (Berlin-Charlottenburg)

Tax Id no.: 29/014/02883

T: +49 30 319 85 54 - 00

F: +49 30 319 85 54 - 99

info@solarc.de www.solarc.de