



SOLAR SOLUTIONS
MADE FOR VEHICLES



SOLAR FUELED EFFICIENCY

Safe Fuel,
CO₂ & Costs

THE INDUSTRY IS CHANGING



NEED FOR ELECTRICITY:

The electrification impacts not only the powertrain, but also the cockpit, the cooling system, or even the e-trailer.



NECESSITY OF EMISSION REDUCTION:

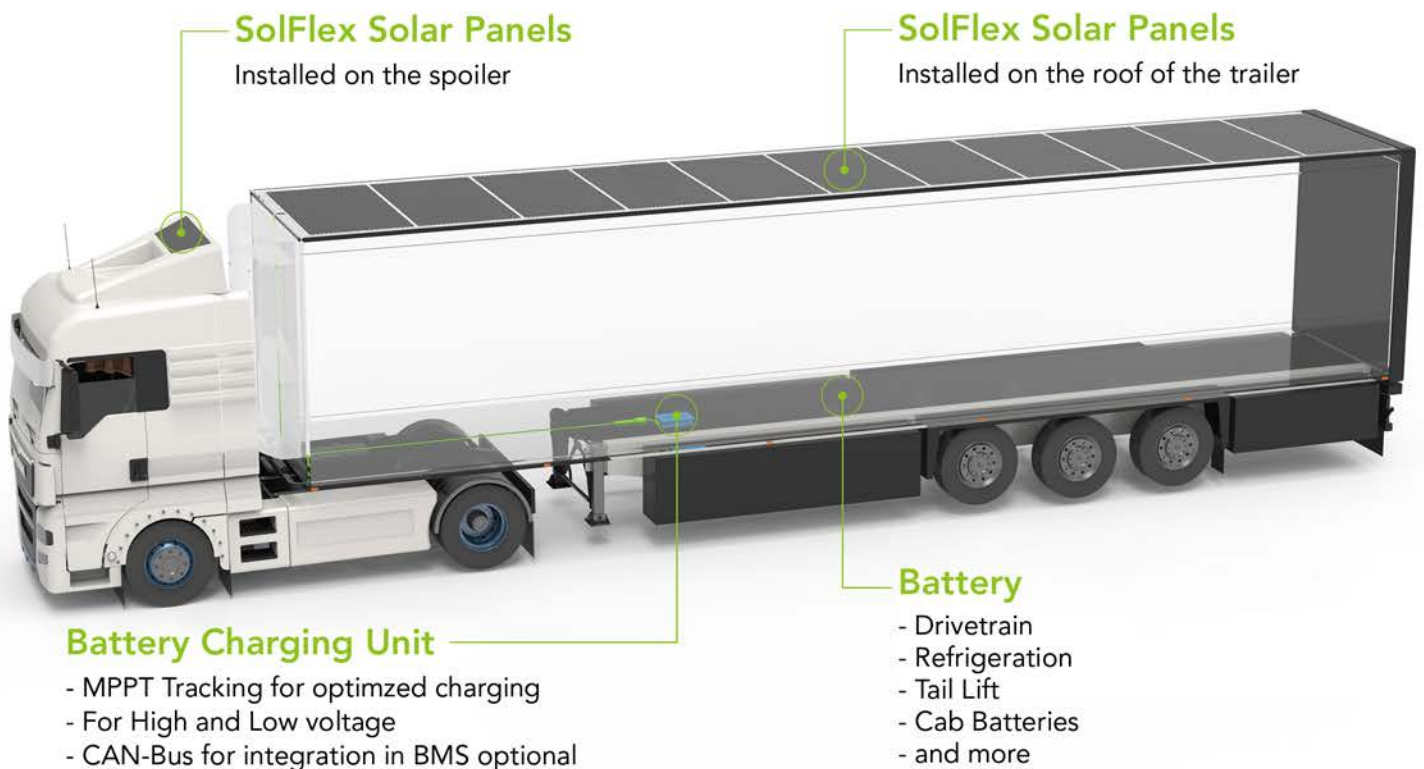
The reduction of CO2 emissions is increasingly becoming a cost factor and is required by various regulations.



DATA DRIVEN OPTIMIZATION

Software-defined vehicles and the need for greater efficiency are making transportation smarter.

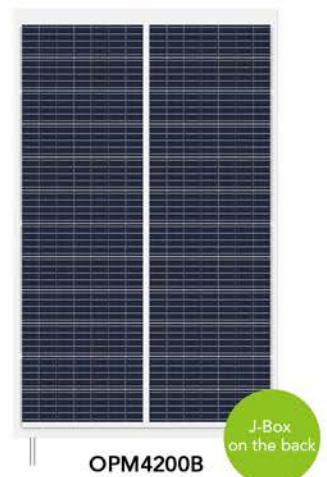
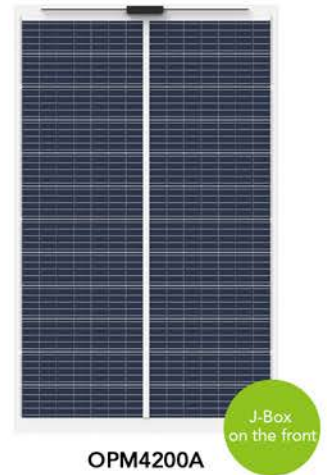
SOLAR IS PART OF THE SOLUTION



THE 1ST FLEXIBLE SOLAR PANEL MADE FOR VEHICLES

	SFX 420 F	SFX 420 R
ELECTRICAL SPECIFICATION		
Cell Type	Mono crystalline	
Power Output (Pmp)	420W	
Short-Circuit Current (Isc)	9.79A	
Open-Circuit Voltage (Voc)	56.50V	
Current at Pmax (Imp)	8.87A	
Voltage at Pmax (Vmp)	47.34V	
Cell Efficiency	≥23%	
Electrical Tolerance	-5%~+10%	
MECHANICAL PARAMETERS		
Module Weight	8kg	
Module Dimension	2000 x 1230 x 3mm	
Bending Radius	25°	
Operating Temperature	-40 - 95°C	
Quality		
Product Warranty	2 years	
Power Output Warranty	10 years / 80%	
Specific Tests	T-peel, waterproof, ice water shock, vibration, salt spray, hail, high pressure cleaning and many more	
Certificates	ISO 9001, ISO 14001, ISO 45001, IMDS listed	

Values at standard test conditions (STC). Specifications subject to technical changes.
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*Other standard panels or customization available

MARKET LEADING TECHNOLOGY



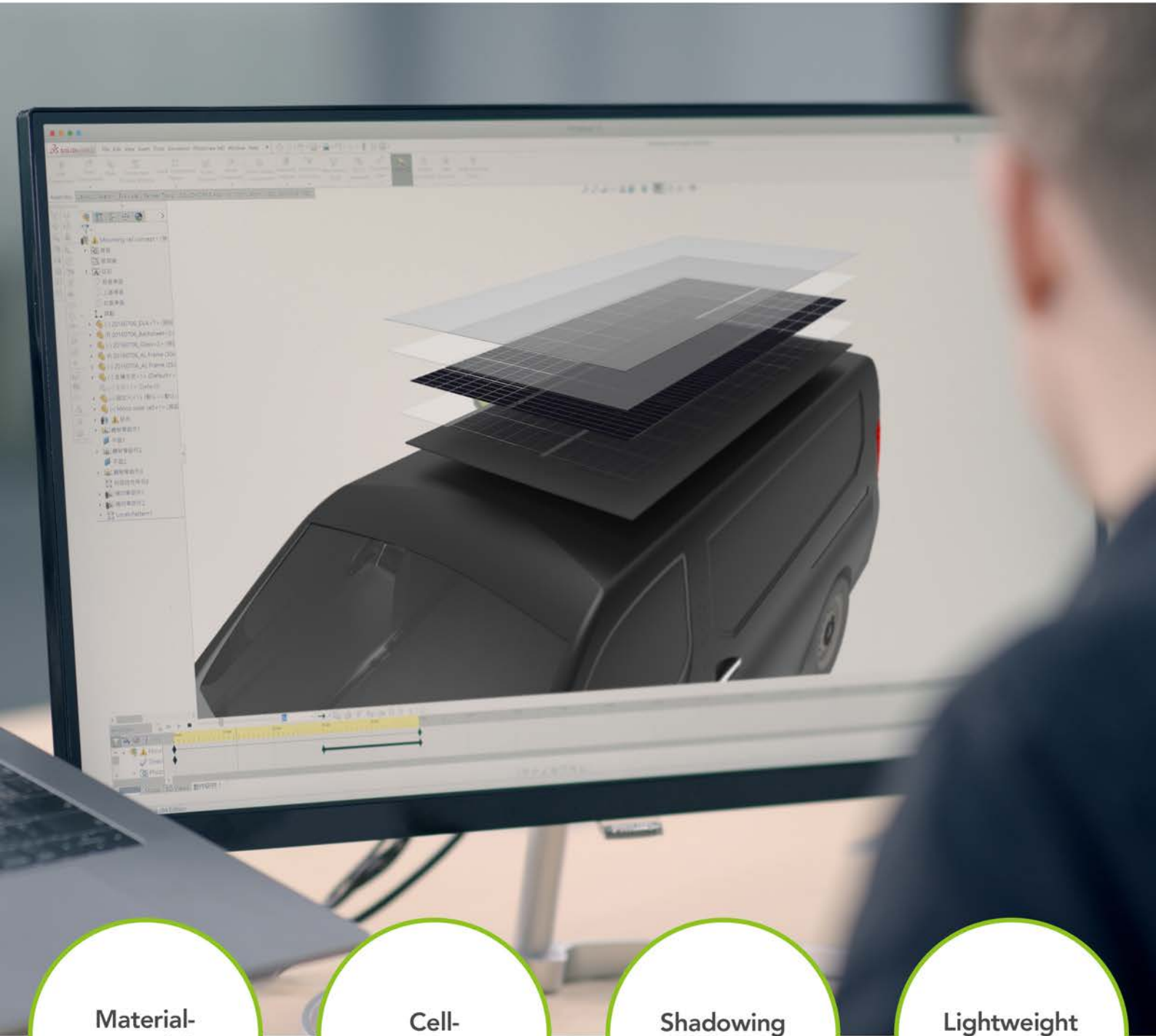
SolFlex is the first flexible solar module developed for vehicles. We understand the unique requirements of the automotive sector, which is why our solar modules undergo rigorous additional tests. These tests consider factors such as vibrations, ice water shock, or even high pressure cleaning. With trusted industry and research partners and in-house testing equipment, we not only meet industry standards, we define them.

The result is a flexible, lightweight solution with a robust and embossed surface that has already proven itself thousands of times on the road.

The frameless module is ultra-thin and 70% lighter than conventional solar panels. Cutting-edge features such as integrated bypass diodes and half-cell technology ensure optimal yields even in shaded and low irradiation conditions.

The pre-applied TESA tape is tested for typical vehicle surfaces. The predefined bonding not only ensures ideal rear ventilation and drainage of condensation water, but also fast installation. The junction box is safe from damage and provides an elegant overall appearance, as it is just as invisible as the cables on the rear side.

WHY SHOULD SOLAR PANELS BE DESIGNED FOR VEHICLES?



Material-compatibility

The bond between the module and the vehicle surface is crucial for performance. To ensure optimal impact resistance, ventilation, and response to temperature, we conducted extensive testing of our panels in combination with different materials.

Cell-Connections

Solar modules are typically not subjected to vibrations, which is a crucial factor in the extended lifespan of our panels compared to conventional flexible solar panels. Our panels feature innovative joints that are resistant to vibrations and do not break.

Shadowing & Size

Efficiency is a crucial. When vehicles are in motion, shadows become more dynamic. Our smart diodes enhance efficiency in such situations, while the unique size of the solar panel ensures optimal utilization of the available area.

Lightweight & Thickness

Our thin and lightweight panels comply with automotive regulations and offer excellent performance. In comparison to thin-film technology, our modules deliver 30% more power while still benefiting from minimal drag. The vehicle height is barely affected.

MARKET LEADING OFF-GRID SOLAR MANUFACTURER

FACTORY IN
GERMANY
STARTING Q4
2024



Founded 2012

To realize the potential of solar energy and make it usable for every application



500 Employees

R&D and Business Development in Berlin, Shanghai & Hong Kong, Factory in Changzhou



13.000 m² Factory area

Self developed automation equipment for innovative production processes



>10 million modules

Leading output of solar panels in off-grid systems all over the world



50+ Patents in products and production

Strategic partnership with Fraunhofer Center CSP; Research Center in Germany & China.