

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 adhesive tape is tested for typical vehicle surfaces. The defined bonding not only ensures ideal rear ventilation and drainage of condensation water, but also quick installation. The junction box can be integrated into the body of the vehicle or placed on top of the solar panel for easy retrofitting.









High Power Density



Light Weight & Super Thin



Flexible & Robust



Vibration-proof & Long-lasting



OPES Solar Mobility GmbH
Zeppelinstraße 1
12529 Schönefeld
info@opes-mobility.com
www.opes-solarmobility.com

	SFX 95 F	SFX 95 R	SFX 150 F	SFX 150 R	SFX 420 F	SFX 420 R	
	J-Box (Front)	J-Box (Rear)	J-Box (Front)	J-Box (Rear)	J-Box (Front)	J-Box (Rear)	
ELECTRICAL SPECIFICATION							
Power Output (Pmp)	95W	95W	150W		420W		
Short-Circuit Current (Isc)	5.05A	10.10A	6.57A		9.79A		
Open-Circuit Voltage (Voc)	24.31V	12.16V	27.88V		56.50V		
Current at Pmax (Imp)	4.58A	9.16A	6.27A		8.87A		
Voltage at Pmax (Vmp)	20.74V	10.37V	24.24V		47.34V		
Cell Type	Mono crystalline						
Cell Efficiency	≥23%						
Electrical Tolerance	-5%~+10%						
MECHANICAL PARAMETERS							
Module Weight	1.8kg	1.6kg	2.5	ikg	8kg		
Module Dimension	1030 x 545 x 3mm	1030 x 545 x 3mm	1120 x 77	5 x 3mm	2000 x 1230 x 3mm		
Bending Radius	25°						
Operating Temperature	-40 - 95°C						
QUALITY							
Poduct Warranty	2 years						
Power Output Warranty	10 years / 80%						
Specific Tests	T-peel, wa	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					

SOLAR PANELS MADE FOR VEHICLES

Material-Compatibility

Customization is possible upon request.

Values at standard test conditions (STC). Specifications subject to technical changes. OPES Solar Mobility GmbH. All rights reserved. © OPES SolFlex_6_2023-8-22

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 key 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

Effciency is a crucial. When vehicles are in motion, shadows become more dynamic. Our integrated diodes enhance effciency in such situations, while the dimensions of the solar module are optimized for vehicle roofs to ensure the maximum yield.

Lightweight & Thickness

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