Powering next gen mobility

Solar Power System for Road Vehicles

Product Card

VERS

New **standard** of economy

Onboard vehicle systems, such as air conditioning, heating, lighting, passenger information displays, and surveillance, place a constant and significant demand on electrical power. In combustion and hybrid vehicles, this power comes from fuel. The higher the demand, the greater the fuel consumption and the strain on the alternator and batteries. In electric vehicles, these systems draw energy from the traction battery, reducing driving range and requiring more frequent charging.

VERS Solar Roof is a solution that integrates photovoltaic technology directly into the vehicle to ease the load on primary power sources. It supplies energy to onboard systems, supports auxiliary batteries, and helps reduce total operating costs.

Working **principle**

Onboard Solar Power

The VERS Solar Roof system utilizes modern photovoltaic panels, mounted and integrated into the vehicle roof, along with a dedicated energy management unit. The system converts solar radiation into electrical energy, which powers onboard devices and supports battery charging.

In combustion and hybrid vehicles, this results in lower fuel consumption and longer service life of electrical system components. What’s more, during layovers at terminal stops, the system ensures a stable power supply without running the engine — reducing the risk of start-up issues and unnecessary wear.

In electric vehicles, the system reduces the load on the traction battery, increasing its lifespan, extending vehicle range, and reducing the need for frequent charging.

Made
to measure

Flexible photovoltaic panels, manufactured to any required size, enable precise adjustment of system output to the available mounting surface and the vehicle’s energy demand.

VERS Solar Roof enables flexible configuration — from compact auxiliary installations to systems that fully power key onboard components. System sizing is based on an analysis of the vehicle’s energy profile and operating conditions, allowing for optimized return on investment and maximum cost savings.

Warranty
Extended

Unlike conventional stationary installations, photovoltaic panels mounted on vehicles are exposed to exceptionally demanding operating conditions — including vibrations, temperature fluctuations, moisture, and dynamic mechanical loads.

As a pioneer in automotive solar technology, we combine premium components with rigorous testing to deliver unmatched reliability — backed by **a 10-year performance warranty** on our photovoltaic panels.

It’s not only proof of their durability and resistance to extreme conditions, but also a long-term guarantee of stable system performance for fleet operators.

Solar Roof System

Lower Fuel Costs and Confident Starts

By reducing the load on the alternator, VERS Solar Roof can cut fuel consumption by several percent — a major benefit for energy-intensive vehicles. Constant battery support ensures reliable engine start-ups, even after long idle periods.

Extended Range in Electric Vehicles

Using solar energy to power onboard systems reduces the consumption of energy from the traction battery, effectively increasing the vehicle's driving range.

Cost Optimization (TCO)

Reduced energy consumption, lower system load, and extended component lifespan directly contribute to lowering the vehicle's total cost of ownership.

Strengthening Brand Reputation

The use of renewable energy solutions reflects a modern, environmentally responsible fleet strategy — reinforcing the image of operators as leaders in sustainable transport.

VERS

12 - 24 V
Operating Voltage

≈ 20%
Average Panel Efficiency

up to 6 kWp
System Power

10 years
Panel Performance Warranty

ISO 9001:2015 Certification

CE Certification

Customer **Contact**

We are delighted to know your views. If you need additional information or would like to test VERS Systems onboard your buses, please feel free to contact our Customer Team.

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We are a part of:

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