

**Espay Solar Energy S.L.**

# **Solar photovoltaic panels dedicated to the road**

Support Customized Product



## Overview

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Solar roads, also known as photovoltaic pavements, are roads that incorporate solar panels into their surface. The basic idea is to replace traditional asphalt or concrete roads with specially designed solar panels that can withstand the weight of vehicles while generating. An Idaho-based company conveniently named Solar Roadways has been working on the development of (you guessed it) solar panels -powered roadways. As the world seeks sustainable solutions, integrating solar technology into transportation infrastructure offers a promising path toward energy-efficient transportation. While panels are typically installed on rooftops or large plots of land, some in the industry think that roads and highways are also suitable places for solar panels. This technology isn't just a futuristic concept – it's already being implemented in pilot projects.

## Solar photovoltaic panels dedicated to the road

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### **Solar-Powered Smart Roads: Revolutionizing Transportation ...**

Discover how solar-powered smart roads are reshaping transportation with clean energy and smart tech!

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### **Solar Roads: Paving the Way for Clean Energy**

Solar-powered roads, also known as solar roads or solar roadways, utilize specially designed solar panels integrated into the road surface. These solar panels capture sunlight and convert it into ...



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### **Solar Roads: Turning Highways into Power Generators**

Solar roads integrate photovoltaic panels into the surfaces of roads, parking lots, and footpaths. These panels are designed to withstand heavy traffic and harsh weather conditions, ...



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### **Solar-Powered Highways: Paving**

## the Road to a Greener Tomorrow

At its core, the solar highway concept involves replacing or overlaying traditional road surfaces with solar panels capable of generating electricity from sunlight.



## All About Solar Roadways: The Promise Versus The Reality

Solar roadways are highways built with special road panels that can generate solar power and have the potential to offer lighting, heating, and other smart road functionality.

## Solar roadways: What you need to know

A solar roadway is any road with solar panel technology attached to its surface, thus producing electricity while supporting the cars and trucks that drive on it.



## All About Solar Roadways: The Promise Versus The Reality

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from sunlight.



## Designing Solar-Ready Highways: The Future of Energy-Efficient

Solar highways incorporate photovoltaic panels into road surfaces or adjacent areas to capture solar energy. These panels can be embedded directly into the pavement, installed alongside ...



 Efficient Higher Revenue

- Max. Efficiency 97.5%
- Max. PV Input Voltage 600V
- 150% Peak Output Power
- 2 MPP Trackers, 100% DC Input Oversizing
- Max. PV Input Current 15A, Compatible with High Power Modules

 Intelligent Simple O&M

- IP65 Protection Degree: support outdoor installation
- Smart I-V Curve Diagnosis Function: locate PV string faults accurately and automatically detect faults
- DC & AC Type-II SPD: prevent lightning damage
- Battery Reverse Connection Protection

 Flexible Abundant Configuration

- Plug & Play, EPS Switching Under 10ms
- Compatible with Lead-acid and Lithium Batteries
- Max. 6 Units Inverters Parallel
- AFCI Function (Optional): when an arc fault is detected the inverter immediately stops operation



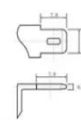
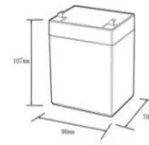
## The Potential of Solar Roadways

Solar roadways are road surfaces embedded with solar panels that convert sunlight into electricity. These roadways utilize photovoltaic cells to capture and convert solar energy into usable ...

## Solar Highways Are Transforming Transportation: Here's What You ...

The collection process begins with specially designed solar panels integrated into the road surface or installed along the highway

infrastructure. These panels are built to withstand heavy ...



12.8V6Ah

Nominal voltage (V):12.8  
Nominal capacity (Ah):6  
Rated energy (WH):76.8  
Maximum charging voltage (V):14.6  
Maximum charging current (A):6  
Floating charge voltage (V):13.6-13.8  
Maximum continuous discharge current (A):10  
Maximum peak discharge current @10 seconds (A):20  
Maximum load power (W):100  
Discharge cut-off voltage (V):10.8  
Charging temperature (°C):0-+50  
Discharge temperature (°C):-20-+60  
Working humidity: <95% R.H (non condensing)  
Number of cycles (25 °C, 0.5C, 100%DoD): >2000  
Cell combination mode: 32700-4s1p  
Terminal specification: T2 (6.3mm)  
Protection grade: IP65  
Overall dimension (mm):90\*70\*107mm  
Reference weight (kg):0.7  
Certification: un38.3/msds

## Contact Us

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<https://espay.es>

