

## SOLAR CAR PORT



### **What Is A Solar Carport?**

A solar carport is a covered parking area with a canopy made from PV panels. Sometimes these carports are designed for a single parking spot – like in residential driveways. Other times, they might be strung together in a series to cover entire commercial parking lots.

Either way, solar carport owners benefit from cheaper and cleaner electricity, while also providing shade and protection for their vehicles.

Some companies offer DIY solar carport kits that homeowners can install themselves. The benefit with these systems is homeowners could realize a cheaper installation price. But, the drawbacks are numerous, most notably, some if not all DIY-installed systems will not qualify for the 30% federal tax credit.

### **How Does A Solar Carport Work?**

Unlike with traditional PV installations attached to rooftops, ground-mounted PV systems rely on tilted panels installed several feet off the ground.

Solar carport structures use a ground-mounted model – except that the solar panels are installed even higher off the ground to provide enough clearance for parked vehicles. Some solar carports also come with in-built electric vehicle (EV) charging stations so that drivers can top up their batteries while out shopping or at home.

## The Benefits of Solar Carports

Despite their costs, however, residential and commercial solar panel carports provide a host of advantages over rooftop and ground-mounted PV systems.

### 1. Reduced Energy Expenses

Solar canopies represent an easy way to turn unused areas into mini power plants. Just as with rooftop solar installations, clients can generate their own clean electricity on-site instead of buying power from the utility company. As a result, solar carport owners benefit from monthly electricity savings – not to mention smaller carbon footprints.

With enough installed capacity, users could even sell excess solar energy back to their utility providers through incentive programs like net energy metering.

It is also easier for solar servicers to reach panels on carports, making it easy to perform the minimal maintenance panels may need during their lifespan.

### 2. More Efficient Use Of Space

Ground-mounted solar installations take up valuable real estate, with the space underneath not providing much benefit. Similarly, the average parking lot isn't terribly productive (even when cars are parked there).

Solar carports offer the best of both worlds – allowing users to optimize limited real estate by transforming unproductive parking spots into renewable energy-generation machines.

### 3. Protection From The Elements

In addition to generating cheaper and cleaner electricity for their owners, solar carports also provide protection from the elements:

- On the hottest days of the year, solar carports help shade vehicles, resulting in more comfortable commutes for their drivers
- Solar carports provide protection from rain, sleet, and snow, helping to prolong the useful lifetimes of the vehicles underneath

### 4. EV-Charging

Commercial and residential solar carports can be integrated with EV-charging solutions:

- Homeowners enjoy peace of mind in knowing that their electric vehicles are charged with clean energy
- Business owners who install [solar carports with chargers](#) give EV drivers another reason to walk through the door

### 5. More Power Generation

Although solar carports carry a higher price tag, they are easier to manipulate and optimize than traditional rooftop PV systems. It's much easier to reorient a parking spot than it is to reposition an entire roof. And this allows installers to orient their clients' carports in the optimal direction to maximize sun capture – and by extension, solar power generation, carbon offsets, and monthly savings.