



- **Who can do the installation of my EV charger?**

Only a certified electrician should install an EV charger.

- **What type of chargers are there?**

There are three types of chargers.

Level 1: these need 120Vac, meaning a regular power outlet. They provide a charge of 3-5 miles of range per hour depending on the electric vehicle and charger

Level 2: these need 240Vac, meaning a dryer power outlet. They can provide a charge of 10-20 miles of range per hour depending on the electric vehicle and charger

DCFC: or DC Fast Chargers; these are typically 25kW chargers and above, may require additional electrical infrastructure and a three-phase service. These are more commonly seen in public EV charging spaces, such as commercial centers. They can provide 20–30-minute 80% charge.

- **What charger should I buy?**

This depends. Ask yourself the following questions: Is this for my home or business? What is our vehicles capacity to charge on each of its ports? What is the amount of spare electrical capacity I have available at my service panel or substation? Do I have a need to collect data from the charger? Do I want to generate revenue from the charge when other people use it?

*For your house:*

If you are looking for a charger for your house, that has 40A spare capacity in the service panel and it is for personal use only, then a basic Level 2 EV charger with a maximum 32A would be the ideal charger. In this scenario a charger larger than 32A would not exceed the service panel capacity and would compromise the home service panel.

The EV charger capacity should only be as large:

1. As the spare capacity available in the service panel, sized for the appropriate electrical protections
2. As what your EV handle on its level two charging port.

*For an apartment building or condo:*

Apartment buildings typically will have limited electrical capacity in common area service panel. They will need to be networked to regulate the charges to allow for the maximum amount of people to connect and pay in some way the energy that is consumed.

Work with your HOA to develop a plan to implement chargers.

Contact our team of experts at Wise for a consultation.

*For your business:*

Having EV chargers as an amenity for customers is a growing trend. EV drivers flock to business that have EV charging stations to rest, eat, shop, etc.

For this application, a networked charger or chargers are the most useful. We can use software to allow for multiple chargers to be installed in buildings with limited electrical capacity while allowing the maximum amount of people to connect and charge their EVs. The software will also allow you to make your charging stations visible in charging station apps so that EV owners know your business has a charger. And finally, a networked charger will allow you to have an additional source of revenue by enabling you to collect payments for each EV that comes to charge their batteries at your business.

A DC Fast Charger might be appropriate if your building has the electrical capacity to incorporate one. DC Fast Chargers are particularly popular in business with valet service. Where the valet can take a customer EVs and return it with a full charge.

Contact our team of experts at Wise for a consultation.

### **Is my level 1 charger enough?**

Level 1 charges typically provide a very slow rate of charging; thus, its use is not that practical for everyday EV drivers. However, it is good to have one around for a last resort charge or if you cannot accommodate another level 2 charger. It might be good to have one as a spare for those just in case moments.

### **Can I install my wise charger outdoor?**

Yes, the Wise charger has a NEMA 4 enclosure meant to withstand the elements.

### **Will my electric bill rise?**

If you primarily charge your EV at home, it is very likely your electric bill will rise. The increase on the bill depends on how much you use your vehicle assuming energy rates and other means of energy consumption remain the same.

In order to estimate how much our bill is increasing you can multiply the amount of kwh charged by the utility rate. For example, if you charge 100 kwh per month and your energy rate is \$0.20/kwh then your utility bill should be increasing by:

$$100 \text{ kwh} \times \$0.20/\text{kwh} = \$20.00$$

Keep in mind your gas expenses for the equivalent miles traveled would be much much higher on an internal combustion engine vehicle.

Does Wise charger come with a rack for the cable/hose?

The hose option is an alternative.

### **Does the Wise connector fit any car?**

The wise connector uses the J1772 plug typically used for North America. Most vehicles come with this plug. Tesla vehicles use their own proprietary plugs, but the vehicles ship with an adapter for J1772.

**How fast does the Wise charger charge?**

It depends. The vehicle's Battery Management System (BMS) is really the one in control of the charge. Wise simply delivers the energy the BMS requests up to 32 Amps. The BMS makes decision based on the battery State of Charge (SOC), battery temperature and other factors. The Wise 32A charge can provide 7.6 kWh of charge which could mean roughly 20 mile per hour for most vehicles.