



EV Charger Buying Guide Quick Reference Handout

Having an EV charger at home ensures your electric vehicle (EV) is always charged and ready to drive. You'll just be able to plug in your car and charge your vehicle at home, when and where it's most convenient for you.

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What is EV charging?

There are different types of EV chargers and the charging speed will depend on which type you choose.

Three EV charging levels

1. **Level 1** – a Level 1 charger can put out 120 volts AC, plugs into any of your standard electrical outlets, and will give you approximately 3 to 8 km of use per hour of charging.
2. **Level 2** – A Level 2 charger uses 240 volts AC, requires you to hire a professional electrician to install it, and will give you approximately 16 to 96 km of use per hour of charging.
3. **Level 3** – A Level 3 charger is a DC charger and will give you up to 80% of your battery charge in approximately ½ hour.

Which EV charging level is best for you?

Level 3 EV chargers are commonly reserved for use at service stations or charging stations, so this comparison will focus on Level 1 vs Level 2.

Level 1 vs Level 2 EV charging

- A Level 1 home EV charger is the least expensive type and a great option if you're happy with overnight charging
- Level 1 chargers charge very slowly. Level 2 chargers are much faster
- Level 2 home chargers require you to hire a certified electrician for install.

EV cables and connectors

1. Most Level 1 and Level 2 home EV chargers use an SAE J1772 connector. This is a universal connector. The only type of vehicle that can't use a J1772 connector is a Tesla.
2. If you have more than one EV and you'd like to use both a Tesla connector and a J1772 connector, you can choose a dual port charger.
3. Level 3 EV chargers use different types of connectors including CCS, CHAdeMO, and Tesla Supercharger.



Factors that affect EV charger compatibility

1. **Max charging rate** –If your max charging rate is fast, you’ll want a high-powered charging station that can supply the power it needs.
2. **Cable length** –EV cable length varies depending on the charger you’ve selected. Most Level 1 and Level 2 EV chargers have a cable length of approximately 18 to 25 feet (5 ½ to 7 ½ meters).

EV charger installation cost

- A Level 2 EV charger requires the installation of a special type of plug that needs to be hard-wired directly to your electric panel.
- Your electrician will be able to determine if your current electric panel can supply the power required for a 240-volt plug.
- Some homes will need electrical upgrades because their electric panels will not allow for a dedicated 240-volt breaker.

Features on EV chargers

1. **Smart features** - Some chargers will have Wi-Fi on board and can connect to your home network so you can access smart features.
2. **Changing charging speed** - Some EV chargers let you switch the charging speed so you can choose slow charging or a faster speed to get back on the road.
3. **Power Sharing with other vehicles** – A dual port charger will manage the power available and distribute it to two EVs.
4. **LED displays** - With an LED display you’ll know at a glance what your power status is.
5. **Communication with the grid** - Some chargers will communicate with your local power grid, so they only charge during non-peak hours.
6. **Cable management** – Some EV chargers manage your cables when they aren’t in use.
7. **Safety features** - All the EV chargers sold at Best Buy are UL-certified. If a charger is UL-certified it has met rigorous safety standards.

EV charger rebates

There are different Federal and Provincial rebates that can help offset the costs of your EV charger. You can check your local or provincial government website for the most up to date information on available rebates, grants, or tax credits.