

240 volt and 120 volt outlets for EV Charging

Here at EV-Chargers™, we want to make things simple, reduce the jargon and allow for an easier purchasing decision so that you get the right EV charger based on your car and situation.

U.S. home electricity supply can be divided into two types -120 volt and 240 volt supply. Electricity supplied to the house is split into 2 x 120-volt halves. 120-volt power is often referred to as 110V, 115V, or 120V as it is supplied around the house. 240-volt charging happens when two 120 volts wires are paired. Level 1 and level 2 ev charging are often described with different voltages.

Why are different levels of voltage used in level 1, 120 volt and level 2 240-volt ev charging?

110 and 220 Volts – This is an older used for older designed appliances but because they were used for many years, people still use this format.

115 and 230 Volts – This term comes from engineering design as electrical devices are made to operate within a tolerance of +/- 10%. This range allows you to plug your appliance into any receptacle.

120 and 240 Volts – This is the unit of measure that electricity is supplied to the home. Commonly we refer to 240 volt level 2 EV charging as it covers past standards as well as being sufficiently flexible to work with residential and appliance voltage ranges.

125 and 250 Volts - This is the maximum voltage expected on the electrical circuit. Plugs are designed to accept up to 125 or 250 volts.

Common questions regarding 120 volt and 240 volt ev charging

What is the most powerful 240/250 volt charging? The most powerful is using a NEMA 14-50 or NEMA 6-50 plug. These plugs have a 50 ampere rating and can deliver the most charge. Go to our EV charger selector tool <https://evchargersusa.com/ev-charger-selector-tool/> and select the plug types below



What is the range between a 120-volt outlet and a 240-volt outlet for EV charging? This depends on if you get a more powerful 40 amp 240 volt level 2 EV charger or not. Generally it is 3-4x more range per hour of charging.

What are the common 240-volt level 2 ev chargers? The most common are NEMA 14-30, NEMA 6-50 and NEMA 14-50 level 2 ev chargers.

Is 240-volt EV charging the same as 220, 230, 240, and 250 volts? Yes, all these voltages describe the higher voltage range. This higher voltage range is used for level 2 ev chargers, electrical dryers, power tools, cook tops, water heaters and central AC.

What is 120 voltage? 120V is the alternating current voltage that is on a single hot wire. Put simply just one phase of electricity supply.

What is the fastest 120 voltage ev charger? The fastest is a NEMA 5-20 plug, which has a 125 volt listing and is typically supplied with 3.7 kW single phase 16 amp.

EV-Chargers™ we make it simple by creating a simple drop down menu to match your car with the right plug and charge level. We provide the widest range of chargers, level 1 and level 2 charging and the most common NEMA plug receptacle types. Our TotalEV™ ev chargers are the most powerful portable solution available for your car.