

5 Things You Need to Know about Electric Vehicles and Charging Stations



1. The Electric Vehicle industry grew by 3X from 2011 to 2012 with 18,000 to 55,000 cars sold. Electric vehicles come in two basic categories... the pure electric vehicle, also known as the Battery Electric Vehicle, and the extended range electric vehicle, also known as the Plug-in Hybrid Electric Vehicle.



Nissan Leaf

Battery Electric Vehicles have a large battery, an electric motor and typically have a range of about 100 miles. The Nissan Leaf pictured here is a good example of a Battery Electric Vehicle.

Plug-in Hybrid Electric vehicles have a medium sized battery, an electric motor and a gasoline-powered generator. These vehicles have a range of 15-40 miles on electric power and about 300 miles on gasoline power for a combined range of about 315 - 340 miles. A good example of this type of vehicle is the Chevy Volt.



Chevy Volt

2. All new generation electric vehicles support the industry standard J1772 connector to plug into an electric charging station. This standard was designed by the Society of Automotive Engineers and is accepted by all major auto manufacturers. So, when purchasing a charging station it is important that it has a connector that adheres to this standard.



J1772 Plug

Electric vehicle drivers need charging services at home, at work and on the road while they shop, dine and find entertainment. The Commercial Real Estate industry will be impacted heavily as charging stations quickly become the new Class 'A' amenity.

3. The quickest and safest way to charge these vehicles is with dedicated charging stations that are installed in the parking lot of the property. Since there is the standard J1772 plug, there is no compatibility issues when installing stations.



Smart Level 2
Charging Station

4. There is a standard power level of 208/240V and 30Amps so there is not a big additional load on a building. The cost to recharge an electric vehicle in one hour is approximately \$0.40 to \$0.80.

5. In order to control access to electricity and be able to charge users a fee that can help to recover the cost of electricity and generate revenue, you need to install **smart** charging stations that have the ability to meter the electricity dispensed, an authentication system to control access and communication capabilities so you can administer and monitor these stations remotely.



Access information on your
computer and smart phone