Your Quick Guide to Choosing the Right Level Charger

With EVs on the rise, more individuals and businesses are looking for EV charging solutions. If you have started the process of researching EV charging solutions, you would have quickly realized that there are 3 different levels for the EV chargers. This is a quick guide to help you understand the differences and choose which charger will be the best fit for your needs.

What we need to first understand is that the levels of EV charging are similar to the levels of fuel grades at a gas station. But instead of describing the quality of the fuel, EV charging levels describe the power output level.

LEVEL 1
Level 1 chargers are typically the charging cords that come with the purchase of an electric vehicle. They are designed more for single-family homes or apartment complexes. The electrical output is between 1.3 kW and 2.4 kW AC current with the range of 5 km (3.11 miles) per hour of charging.

LEVEL2
Level 2 chargers are designed to provide residential and smaller commercial uses with faster charging capabilities while still being compatible with most EV models. The electrical output is between 3 kW to around 20 kW AC current with the range of 30 to 50 km (20 to 30 miles) per hour of charging.

Besides just being more powerful than level 1 chargers, level 2 chargers are often designed with software that will adjust power levels and bill customers appropriately. While this does make them a more costly option to level 1, the software capabilities make them a more ideal solution for apartments, universities, retail spaces, and employers that want the perk or addition of EV charging.

LEVEL 3
Level 3 chargers are designed specifically for commercial use. This includes heavy-duty EVs and most passenger EV models. The electrical output is between 50 kw to 350 kw DC current with the range of up to 30 km (20 miles) per minute of charging. Their ability to charge so fast has sparked their more commonly known name of “superchargers.”

The biggest draw to a level 3 charger is its incredible ability to fully charge an EV in under an hour. For those looking to offer their customers a faster more efficient charging solution, level 3 is a better option over level 2 chargers.

It is important to note that some smaller passenger vehicles such as plug-in hybrids or compact models should not use level 3 chargers. For more information on the specifics of EV charging levels to vehicle compatibility, visit U.S. Department of Transportation website.