





PV + EV

Use PV to charge an EV. The E-Gear[™] "micro-grid" system uses PV generation in combination with a Battery Energy Storage System (BESS), to power electrical devices that are not connected to the grid. An electric car, for example, can utilize the energy generated by a dedicated PV system, requiring less energy imported from the grid. A micro-grid is quite literally a self-contained, personal power generation plant! Right-sizing both the PV system size and the battery storage capacity is key.

- Charges an electric vehicle with clean solar energy
- Eligible for available tax credits
- Designed to work independently of the Utility grid
- Designed for existing NEM customer to add more PV capacity for EV charging without losing NEM status
- Designed to be "no impact" to the Utility grid
- Reduces Utility grid system peak demand in evenings
- Micro-grid technology gives your electric vehicle and critical loads in your home access to PV power during Utility grid outages











ClipperCreek® LCS-25P EV Charge Station

- Charging Amperage: 20A (4.8 kW max)
- Supply Circuit: 208/240V, 30A
- Installation: Plug connected NEMA 14-30, holster included
- Cord Length: 25 feet
- Enclosure: NEMA 4; indoor rated, fully sealed
- Warranty: 3 years
- Certifications: UL, cUL, ETL, cETL
- Dimensions: 11"L x 4"W x 3"D
- Made in America
- The most advanced Level 2 residential electric vehicle (EV) charge station. Built and tested to automaker standards to ensure a reliable charge everytime.

Works with most plug-in vehicles including: Ford C-Max, Ford Fusion Energi, Nissan Leaf, BMW i3, BMW i8, Chevy Volt, Ford Focus Electric, Fiat 500e.

Maximum Power and Energy								
Batteries	Battery Cabinets	Label Rated Energy (kWh DC)	Maximum Usable Energy at 90% DOD (kWh AC)	Max Battery Charge/Discharge Power (kW)	Max Battery Charge/Discharge (amps AC)	Max EV Charge Power (kW)	Estimated Max Battery Charge Time (4.8 kW draw)	Estimated Charge Miles (full charge)
4	2	12.8	11.52	5 kW	20.8	4.8 kW	2.2 hrs	44 miles*
5	3	16	14.4	5 kW	20.8	4.8 kW	2.7 hrs	54 miles*
6	3	19.2	17.28	5 kW	20.8	4.8 kW	3.7 hrs	74 miles*

*NOTE: Based on an industry rule of thumb is that 20-amp service will roughly give you the ability to add miles of range in an hour—just as 15 amps will add about 15 miles in an hour of charging. These numbers are somewhat optimistic and are more dependent on your driving habits and geographical terrain (going over mountains takes more energy).

Power: The power component of a battery system defines the maximum amount of power that can be transferred in and out of the battery at any given time. **Energy:** The energy component defines the usable amount of energy that can be stored in the battery for later use.

Keep in mind that some plug-in hybrids can take advantage of a faster rate. BESS is limited to 20-amps, but it's still wise to use solar powered energy from the battery at a slightly lower charge rate than using grid power for all your charging needs. Based on your average drive distances, total charging times may rarely exceed 3-4 hours and can be done while you are relaxing or sleeping.

The system also includes an Automatic Transfer Switch that will switch the EV charging needs back to the grid incase there is not enough power stored in the system to fully charge your vehicle so you are never left without a charge (on cloudy days for example).

X

System Component Mounting Options: Exterior Rated / Interior Approved

