

# Electric vehicle (EV) charging stations

## Exceptionally positioned for a bright future

The global market for electric vehicles (EVs) is projected to grow at a robust pace for the next several years. This demand is driven by efforts to reduce carbon emissions, the desire for high-performance vehicles, continuous improvements of EV technology and government incentives.

## We have extensive experience in designing, engineering and manufacturing all types of EV charging stations

### Personal residence EV charging station

#### Design support

- Power modules
  - AC/DC power electronics
- Metal enclosure
  - Tamper proof enclosures



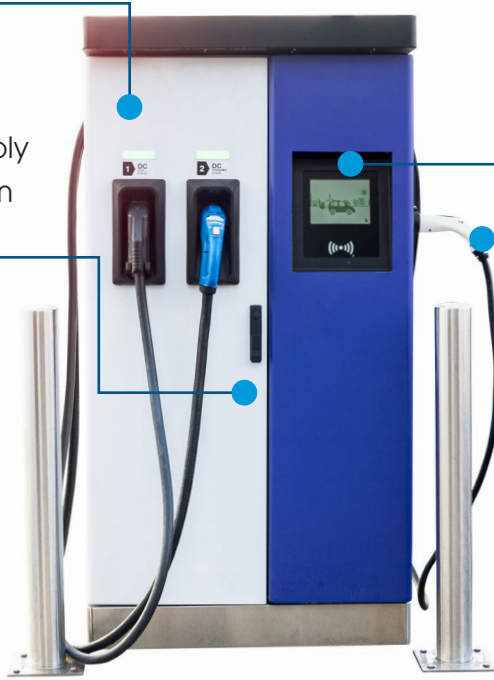
#### Engineering and manufacturing support

- User interface and network connectivity
  - Display screen
  - Wireless communication
  - Vehicle communication
- Mechanical systems
  - Temperature sensors
  - Charging plug
- Electrical distribution systems
  - Circuit breaker and fuse blocks with global approvals

### Commercial EV charging station

#### Design support

- Power modules
  - AC/DC power electronics
  - DC/DC power electronics
  - Auxiliary AC/DC power supply
  - Battery management system
- Metal enclosure
  - Weather and tamper proof enclosures



#### Engineering and manufacturing support

- User interface and network connectivity
  - Display/touchscreen
  - Wireless communication
  - 5G, IoT, controls
  - Vehicle communication
- Mechanical systems
  - Magnetic sensors
  - Temperature sensors
  - Cooling systems
  - Charging plug
- Electrical distribution systems
  - High speed fuses
  - UL class fusers and fuse block
  - Earth fault relay
  - Current transformer

## Types of charging stations

The level of the charging station is based on the charge rate.



#### Level 1 - slow charging

- Fully charged in 10+ hours
- 3 and 5 miles of range per hour of charge
- Personal residence

#### Level 2 - fast charging

- Fully charged in 9 hours
- 25 miles of range per hour of charge
- Business, retail, public places and some homes



#### Level 3 - DC fast charging station and energy storage system

- Fully charged in 1.5 hours
- 200 miles of range per hour of charge
- Locations along public highways or freeways

For more information, visit [flex.com/connect](https://flex.com/connect). Work with Flex to build reliable, safe EV charging stations with fast charging times.