Caliber Interconnect Solutions®

design for perfection

ISO 9001: 2015 Certified

Electric Vehicle Charger

Electric VehicleCharging

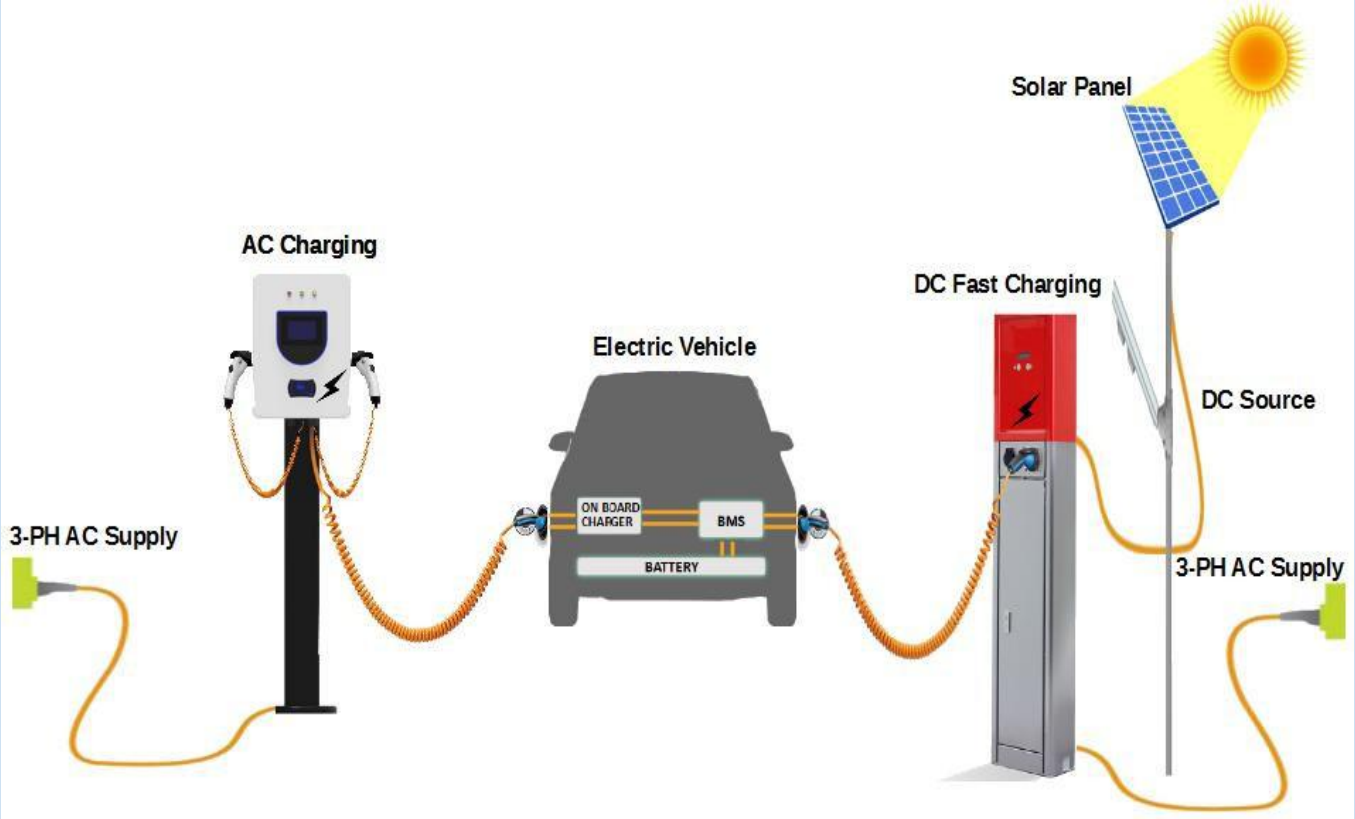
- With ever-increasing pollution levels and its impact on the environment, governments are looking for alternate energy options for transportation services. Rapidly depleting global oil reserves and rising oil import bills of governments are also driving the need for alternate energy sources for the transport vehicles. Transportation as a whole is undoing a transformational change worldwide and Electric vehicle are the best solution to address both pollution and oil import bills.

  - Electric vehicles are becoming more and more common these days. With the growing demand for Electric vehicles, the charging infrastructure is critical for sustaining the e-mobility services.

- With our thirst for technology coupled with our experience in developing green energy solutions, we help our customers with innovative and smart charging solutions to addressthe charging infrastructure challenge.

EV Charging Modes

- An electric vehicle can be charged either through AC or DC as shown in the below picture.
- While charging the EV in AC charging mode, the AC power supply is directly connected to the EV. The onboard charger converts the AC to DC and charges the battery through the BMS(Battery Management System). In DC charging mode, AC to DC conversion is carried out in the offboard charging equipment and DC is directly applied to the battery through BMS. Both AC and DC charging modes have their own advantages and disadvantages.



EV Charging levels

The external equipment used to supply electric energy to recharge electric vehicles is called EVSE(Electric Vehicle Supply Equipment)and is classified into three levels depending on the charging power as shown in the table

EVSE Type	Power Supply	Charging Power	Charging time for 24 Kwh Battery
AC Charging Station: Level 1 Residential	120/230 VAC 12A to 16A Single Phase	~1.44 KW to ~1.92 KW	~17 hrs
AC Charging Station: Level 2 Commercial	230 VAC 15A to 80A Single phase/Split phase	~3.1 KW to ~19.2 KW	~8 hrs
DC Charging Station: Level 3 Fast Chargers	300VDC to 600 VDC Max 400A (poly phase)	120 KW to 240 KW	~30 mins

Our Solutions & Services

We design, develop and integrate all of the technology that powers your EV charging infrastructure needs. Our unique combination of expertise in hardware, firmware and application software helps us in designing the charger hardware in a reliable and modular way, integrate the smart and intelligent firmware and connect the EVSEs to the cloud for remote monitoring and control.

Intelligent EVSEs

Green powered EVSEs

Cloud based Charging Station Management & Mobile App

Our Solutions & Services

Intelligent EVSEs

- With our in-depth experience in power electronics and embedded product design, we understand that the EVSEs can't be a simple dump device only to supply electric energy to the EV. Our engineers build intelligence in our EVSEs to smartly manage the power delivery. Our smart and intelligent EVSEs handshakes with the EV, continuously monitors the power delivery and disconnects the power delivery on detecting any fault conditions. We provide energy efficient and cost effective EVSEs solutions both for residential and commercial uses.

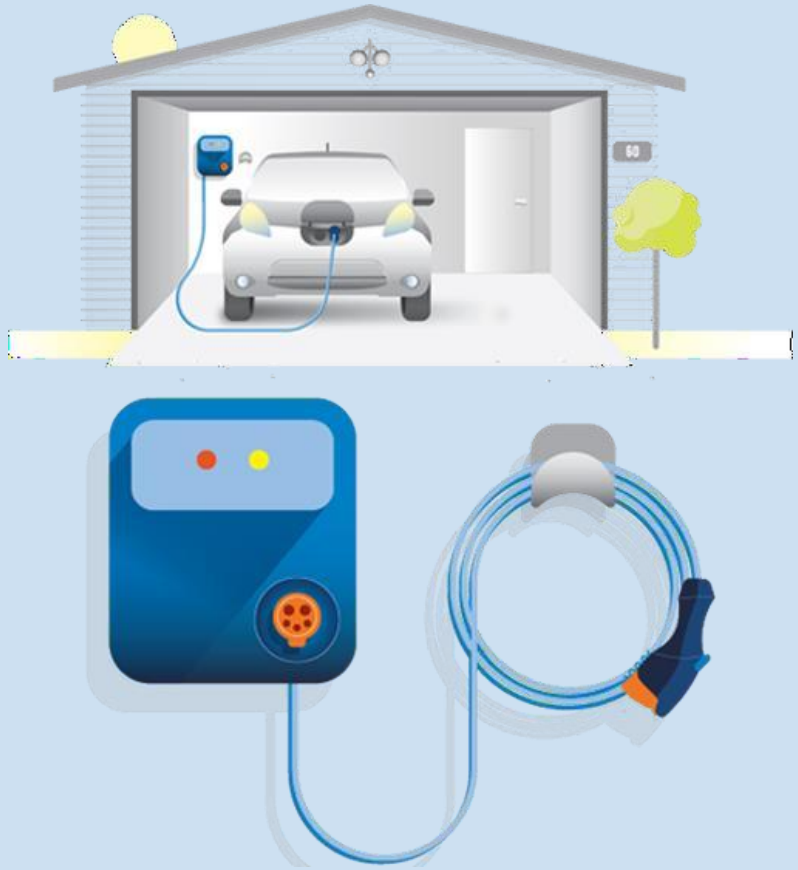
Level 1 Portable AC Charger

Level 2 Commercial AC Charger

Our Solutions & Services

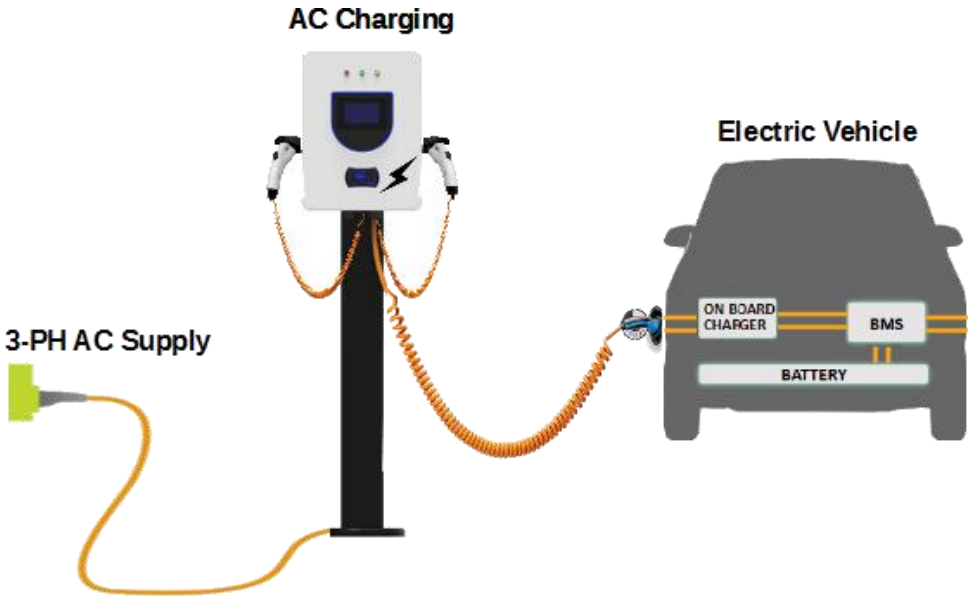
Level 1 Portable AC Charger

- Level 1 Portable AC charger is designed for residential use. It can be installed at home or carried with the EV and use it wherever the AC power is available for charging.
- Level 1 AC charger is designed to deliver 3.3KW power to the EV at 230V AC input and 15A current output. It is built with energy management and protection.



Level 2 Commercial AC Charger

- Level 2 Commercial AC charger is designed for commercial use. It can be installed at Parking, Shopping Malls, Cinema Halls, Residential buildings etc.
- Level 2 AC charger is designed to deliver 7.2KW power to the EV at 230V AC input and 32A current output. It is built with energy management, protection, payment options and connectivity. The Level 2 AC charger is also designed to have 3 AC outlets to charge three electric vehicles at a time with the total power capacity of 22 KW.



Green Powered EVSEs

- The green powered EVSEs are designed to source the electric energy from the Solar panels. Green EVSE solutions enable the customers and Charging station operators to generate their own power.

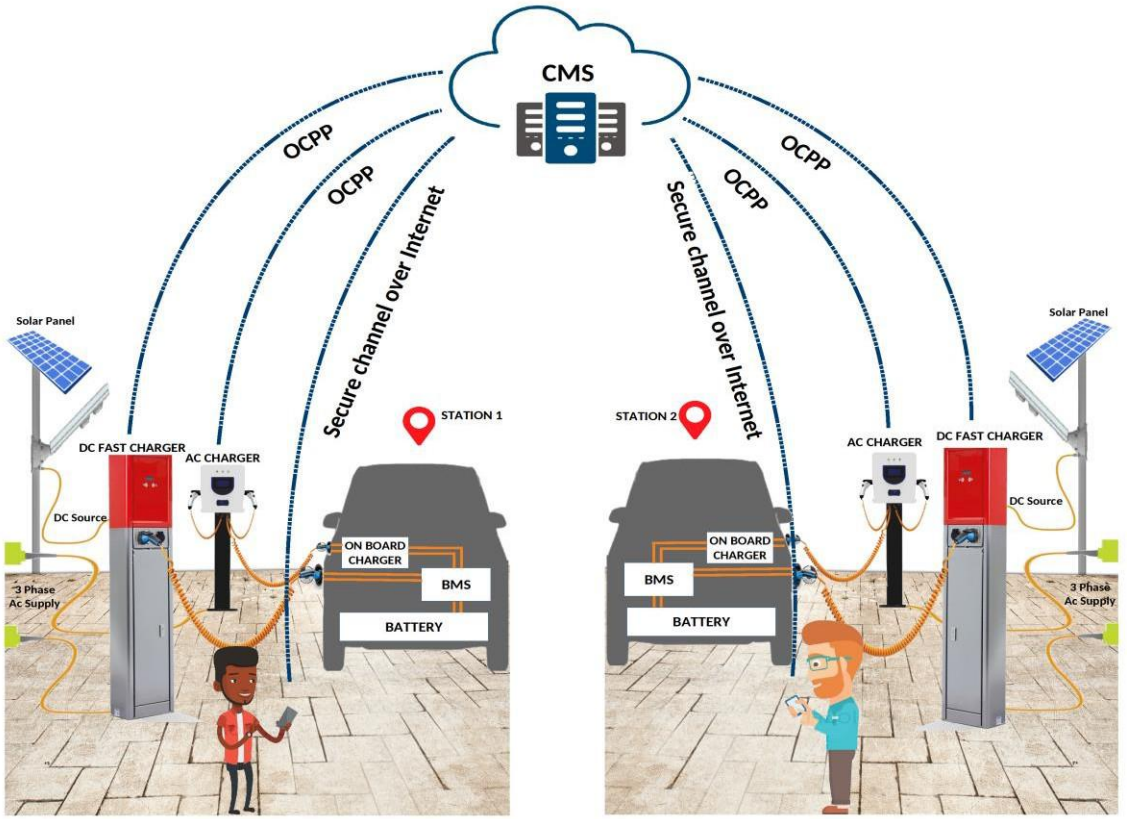
Our Solutions & Services

Cloud based Charging Station Management(CSM) & Mobile App

- The green powered EVSEs are designed to source the electric energy from the Solar panels. Green EVSE solutions enable the customers and Charging station operators to generate their own power.

The CSM is designed and developed with the following features

- Open Charge Point Protocol 2.0
- Platform to manage the charging stations
- Interoperable with multiple vendor's charging station
- Innovation with open standards
- Focus on Driver convenience - Locating and Reserving Charging stations with a Mobile App
- Billing & Access Control



Contact Info

Caliber Interconnect Solutions®
design for perfection

COIMBATORE

No 9B/1, Poompukar nagar ,
Thudiyalur,
Coimbatore - 641034,
Tamilnadu , India

P: +91 422 2448557

BENGALURU

#451, 17th Main, 17th Cross,
Sector 4, HSR Layout,
Bengaluru - 560 102,
Karnataka ,India

P: +91 080 49792244

KOLKATTA

174/1/2, Netaji Subhash
Chandra Bose Road,
Kolkata -700 040,
PO: Regent Park,
West Bengal, India.

P:+91 8220045100

sales@caliberinterconnect.com

www.caliberinterconnect.com

USA

24230 English Rose Pl,
Valencia, CA 91354,
California , USA.

P: 510-709-0750

JAPAN

Mr.Kimiaki Tanaka,
1-12-15 Ogikubo, uginamiku,
Tokyo 167-0051, Japan.

P:+81-36321-8051

SINGAPORE

Caliber Interconnects Pte Ltd
89, Short Street,
08-06 Golden Wall center,
Singapore 188216