

Job title	EVSE Engineer
Work arrangement	Office based
Office location	1 - 2 Beech Court, The Lakes Business Park, Fenstanton, PE28 9RF
Reports to	Chief Technology Officer

Oomph EV is a Cambridge-based clean-tech company, focused on developing & manufacturing advanced, mobile and tethered DC EV charging solutions. We're focused on enabling the B2B transition by providing smart DC solutions which break the complex infrastructure barriers and help accelerate the transition to electrification. Delivering scalable, flexible, and smart charging infrastructure will help companies to reach decarbonisation targets easier and quicker.

We are passionate about safety, design and quality, relationships and delivering outstanding results in every detail both internally and externally.

We have a team who each excel in their areas of expertise, a company vision we will continue to build upon with an inclusive team with a shared vision to make a difference with passion & excellence.

The Opportunity

We are building the next generation of EV charging infrastructure, you will be part of the team designing and building our ecosystem. We don't expect you to have lots of experience in all of these areas – we're looking to complement our existing team, and if you have experience in any of the below and a willingness to dive into the rest we want to hear from you!

You will be jointly responsible for delivering an innovative Mobile DC Fast Charging ecosystem. You will drive forward the support of the Mobile DC charging system whilst collaborating with internal and external stakeholders to develop an appropriate system level solution based on clear feature definition and requirements. You must have experience designing electrical schematics as well as the design of harnesses and interfaces. You will also have strong knowledge of electrical system FMEAs as well as hands on testing and debugging.

What would we like you to bring

We want you to be successful in your role, in order to achieve this, you will need to have proven experience in design and development within the automotive/aerospace Electrical and Power Electronics systems sector, although other areas of relevant technology development may also be considered. Additionally, you will need good knowledge of various charging systems, although ISO15118 and UL2251 are critical. You'll also need to demonstrate exposure to working with three phase power (240VAC to 480VAC) and DC voltages up to 1000V as well as validation of LV systems and appropriate legislation for EV charging systems, and a good understanding of network protocols like: CAN, Ethernet, SPI, I2C, ARINC.

The Role

- **Prototype EVSE Builds:** Lead and be responsible for the installation and commissioning of batteries, charging and other HV systems for the prototype products. Ensure the system performs to the designed specification utilising expertise and understanding of electric vehicle technologies.
- **EVSE System Maintenance:** Perform maintenance, diagnostics, and repairs and improvements to the high-voltage systems including the HV battery pack ensuring optimal performance and safety. Demonstrate proficiency in planning, time management and troubleshooting problems.
- **Technical Contribution:** Contribute and participate in the selection of the right solution and suppliers for vehicle charging systems and be responsible for its integration into the products.
- **Quality Assurance:** Collaborate with Engineering teams to conduct thorough quality checks, identifying and rectifying any discrepancies in the prototype builds.
- **Safety Compliance:** Adhere to safety standards and protocols for working with high-voltage systems, creating and ensuring a safe working environment.
- **Documentation:** Maintain detailed records of work performed, including diagnostics, repairs, and modifications to EVSE systems.
- **Collaboration:** Work closely with Engineering teams to integrate EVSE systems seamlessly into vehicle prototypes.

Knowledge, Skills & Qualification

- Proven track record with extensive experience (minimum 3 years) working on high-voltage electric vehicles or charging equipment, including battery packs and charging systems.
- An understanding of charging technology and/or power electronics ([i.e. AC/DC](#) charging, DC/DC topologies)
- Experience and technical background in EV vehicle operation, charging ecosystem, EVSE
- Knowledge of all relevant vehicle legislation and certification requirements for automotive LV Distribution, DCDC converters and vehicle charging systems and their integration
- Deep understanding of electrical signals, CAN, LIN, Ethernet, PLC Communication
- Knowledge of latest IEC61851, J1772/CCS, DIN70121, ISO15118 charging protocols
- HV Distribution, DCDC converters and charging system development for high performance hybrid and/or electric vehicles
- Ability to diagnose and resolve complex issues related to HV systems efficiently.
- Willingness to adapt to evolving project requirements and contribute to a dynamic and innovative work environment.
- Strong collaboration and communication skills to work effectively within cross-functional teams.

Location and commitments

- Permanent
- Full time
- 37.5 hours per week
- Office based, occasional travel

