Empowering the Future of Electric Vehicle Charging:
IoT Charging Management System for Electree-Fi

TRANSFORMING ELECTRIC VEHICLE CHARGING

ElectreeFi
Next Generation IoT Solution for EV's

Limitless: Fueling the IoT Revolution

At Limitless Mobility Solutions, we're driving the future of the Internet of Things (IoT) with a vision to connect businesses and consumers through intelligent and secure mobile networks. Through collaboration, innovation, and industry regulation, our goal is to accelerate IoT services and devices across various sectors, including electric mobility.

With IoT-based solutions, we're creating smarter cities and driving advancements in Sustainability.

Electree-Fi: Revolutionizing Charging Infrastructure

Electree-Fi, a leader in electric vehicle (EV) charging solutions, has partnered with Limitless Mobility Solutions to address the growing demands of EV infrastructure. By leveraging cutting-edge IoT technology, Electree-Fi has developed a robust, scalable, and user-friendly Charging Management System that is poised to redefine the EV charging experience.

Challenges in the EV Charging Landscape:
Addressing the roadblocks for a cleaner, greener future

With the rise in electric vehicle adoption, the traditional EV charging infrastructure faces several key challenges:

01
Real-Time Insights
- ⚡ Offers real-time updates on station status through embedded software.
- ⚡ Comprehensive analytics for smarter decision-making.

02
Charging via RFID, OTP and offline
- ⚡ Secure, convenient charging options for users.

03
Software
- ⚡ Embedded software.
- ⚡ Developed Android IoT application.

04
Technology
- ⚡ Embedded C, Java, Android IoT, SQL lite, Socket programming.

05
Regulatory Compliance
- ⚡ Stay compliant with safety standards & industry regulations to avoid penalties.
- ⚡ Protect user data with robust privacy practices and follow regional/international laws.

06
Key features of the Electree-Fi Charging Management System:
- ⚡ **Offline Charging:** Provides charging capabilities even without internet connectivity.
- ⚡ **Remote Control:** Start and stop charging remotely via the app.
- ⚡ **Timer Function:** Ensures a two-minute waiting time for plugin, enhancing operational efficiency.
- ⚡ **Digital Signage Solution:** Delivers real-time station status to users through digital displays.
- ⚡ Reading Meter Values.

07
Scalable & Future-Proof
- ⚡ Designed to grow with the expanding EV market.
- ⚡ Handles increasing network of charging stations effortlessly.

08
Infrastructure Integration
- ⚡ Seamlessly integrate new stations with existing infrastructure.
- ⚡ Ensure compatibility across different charging protocols and models.

09
Seamless Integration
- ⚡ Works with existing charging infrastructure.
- ⚡ Smooth operations across diverse networks and regions.

Electree-Fi's Smart Solution:
Redefining the charging experience for a sustainable future

Electree-Fi's IoT-based Charging Management System is the answer to these challenges, offering an integrated solution that includes intelligent hardware, cloud-based management, and seamless mobile applications.

Intelligent Charging Stations

- Equipped with IoT sensors for real-time data on availability, usage, and charging status.
- Integrated with smart controllers for remote monitoring and management.

Cloud-Based Platform

- Central hub for aggregating and analyzing charging station data.
- Includes management tools like billing, user authentication, and session monitoring.

Android & iOS Applications

- User-friendly apps for both platforms.
- Provides access to station info (availability, location, pricing, real-time status).
- Allows users to reserve slots, start sessions, and get progress notifications.

The Power of Flexibility:
Charging for every need

Electree-Fi's charging points support both single-phase and three-phase charging, ensuring compatibility with a wide range of electric vehicles - whether two-wheelers, three-wheelers or Four-wheelers. This flexibility ensures that every electric vehicle, regardless of make or model, can access reliable, fast, and efficient charging services.

By adhering to the **Open Charge Point Protocol 1.6 (OCP 1.6)**, Electree-Fi's chargers provide secure, interoperable, and future-proof charging solutions. These chargers are designed to integrate seamlessly into global networks, allowing users to charge their vehicles with confidence. Additionally, Electree-Fi follows the ARAI guidelines, ensuring that all products meet the highest standards of performance, safety, and quality.

A
Custom-Designed Chargers

- Four-socket charging boxes meeting industry standards.
- Features accurate meter value readings, including voltage, current, and units, with Class 1 meter accuracy.
- Adheres to the Open Charge Point Protocol 1.6 (OCPP 1.6) and ARAI guidelines.

B
Comprehensive EV Charging Solution by designing PCB

- Supports charging for electric two-wheelers, three-wheelers or Four-wheelers.
- Compatible with both Single-phase and three-phase charging.

C
Technology

- Uses embedded C language for seamless integration and OCPP 1.6 compatibility for secure and efficient charging.
- PCB Design through Altium Designer.

D
Seamless Communication

- OCPP 1.6 integration enables secure and efficient charging.
- Ensures interoperability and compatibility across various networks.

E
Safety & Reliability

- Built according to ARAI safety, performance, and quality standards.
- Guarantees a safe, reliable, and efficient charging experience for all users.

Why choose Electree-Fi's IoT Charging Management System?

Electree-Fi's IoT Charging Management System is the ultimate solution for businesses seeking efficiency, sustainability, and scalability in managing their EV charging infrastructure. By choosing Electree-Fi, you not only benefit from:

Cost Optimization:

Leverage predictive maintenance and energy-efficient management tools to reduce operational costs and maximize your investment.

Customized Solutions:

Our system can be tailored to your unique business needs, ensuring seamless integration with your existing infrastructure and meeting specific regional or industry requirements.

Sustainability:

Play a key role in the global shift to a sustainable future by supporting the growing electric vehicle market with eco-friendly charging solutions that help reduce emissions and energy consumption.

Proven ROI:

Experience a measurable return on investment through increased efficiency, smarter decision-making, and customer satisfaction.

Electree-Fi ensures that you stay ahead of the curve, delivering cutting-edge technology that not only meets the demands of modern energy use but also prepares you for the future of mobility.

Driving the Future of Electric Mobility

Empowering the shift to a sustainable future

Electree-Fi is leading the way toward a cleaner, more sustainable future. With its IoT-based Charging Management System, it is creating a more reliable, efficient, and user-centric charging infrastructure that supports the increasing demand for electric vehicles. By providing intelligent charging stations, data-driven insights, and seamless integration, Electree-Fi is shaping the future of electric mobility and contributing to the global push for cleaner transportation.

Join the Revolution:
Charge ahead with Electree-Fi

Building the infrastructure for tomorrow, today

Electree-Fi's Charging Management System is not just about powering vehicles it's about powering a better future.

Be a part of the change - charge smarter, drive further with Electree-Fi.

LIMITLESS
Innovation meets excellence

Signature Tower First Floor, Plot No 3 Sector, Knowledge Park III, Greater Noida, Uttar Pradesh 201308

contact@limitlessmobil.com   www.limitlessmobil.com   +91 63906 65408