

TECH OFFER

Portable DC Fast Charger for Electric Vehicles (EVs)



KEY INFORMATION

TECHNOLOGY CATEGORY:

Energy - Battery & SuperCapacitor

Electronics - Power Management

TECHNOLOGY READINESS LEVEL (TRL): **TRL7**

COUNTRY: **THAILAND**

ID NUMBER: **TO175255**

OVERVIEW

The rapid growth in electric vehicle (EV) adoption has sparked a strong demand for more convenient and reliable charging solutions. As the number of EVs continues to surge, drivers are increasingly seeking fast, flexible charging options to keep their journeys uninterrupted. Mobile charging services offer a promising market opportunity by addressing key challenges such as range anxiety and limited access to fixed charging stations.

In response to this demand, the technology owner has developed a portable DC fast charger that provides on-the-spot charging, offering quick and efficient roadside assistance. This compact, user-friendly device allows drivers to swiftly resume their journeys, reducing downtime from unexpected battery depletion. It offers a practical alternative to traditional towing services, helping drivers avoid unnecessary delays. Additionally, the technology extends its reach by equipping tow truck operators with portable chargers, enabling them to offer enhanced roadside support. This solution is valuable for service providers, fleet operators, and insurance companies seeking to differentiate themselves in the competitive EV market. By offering fast and mobile charging, these businesses can enhance customer satisfaction and ensure EV drivers have a reliable backup whenever

needed.

The technology owner is actively seeking collaboration with relevant partners, including EV manufacturers, operators, service providers, and insurance companies, to expand their service offerings and provide added value to the EV ecosystem.

TECHNOLOGY FEATURES & SPECIFICATIONS

- **Output Current:** 30-50 kWh DC
- **Battery Capacity:** Greater than 10 kWh
- **Compact Design:** Engineered for easy installation on tow truck beds, ensuring minimal space usage while maintaining efficiency
- **Regulatory Compliance:** Fully compliant with transport regulations, designed to ensure stability and safety during transport
- **Plug & Play Installation:** Features a user-friendly, quick setup process, providing rapid roadside assistance with minimal downtime

POTENTIAL APPLICATIONS

This portable DC fast charger is designed to equip tow trucks with a convenient solution for emergency EV charging, offering an innovative alternative to traditional towing services. Key applications include, but are not limited to:

- **Insurance Partnerships:** Collaborate with insurance companies to bundle mobile charging services with EV insurance plans. This adds value by offering emergency roadside charging as part of the insurance package.
- **Fleet and Roadside Assistance:** Ideal for fleet operators and roadside assistance companies, this charger offers consistent, on-demand charging solutions, ensuring quick response times and improved service for EV drivers.

UNIQUE VALUE PROPOSITION

- **Instant On-the-Spot Charging:** Provides immediate charging at the vehicle's location, eliminating the need for towing to a charging station
- **Minimized Downtime:** Dramatically reduces waiting time, allowing drivers to swiftly continue their journey
- **Convenient and Stress-Free:** Resolves the issue of unexpected battery depletion, avoiding the stress of being stranded on the road
- **Cost-Effective Alternative:** Offers a more economical solution than traditional towing, benefiting both service providers and EV drivers