ClimaRunners

Transforming Fleet Management with Cutting-Edge IoT Solutions

ClimaRunners: Revolutionizing Electric Refrigerated & Freezer Truck Management

ClimaRunners is redefining the electric refrigerated and freezer truck industry with advanced IoT-powered solutions and state-of-the-art vehicle monitoring technology. Our innovative approach enhances operational efficiency, ensures reliability, and promotes sustainability in fleet management and vehicle tracking.

About Limitless Mobility Solutions:

At Limitless Mobility Solutions, we are shaping the future of transportation with groundbreaking IoT-based technologies. Our solutions provide real-time monitoring, data-driven analytics, and seamless integration, ensuring your fleet operates at peak efficiency—scalably and sustainably.

Challenges in Refrigerated & Freezer Truck Monitoring

Electric refrigerated and freezer trucks play a crucial role in various industries, but they present unique challenges:

REAL-TIME MONITORING

Gaining live updates on vehicle status, environmental conditions, and performance can be difficult.

DATA-DRIVEN ANALYTICS

Lack of insights into historical data hampers proactive fleet management and maintenance.

COMPLEX INTERFACES

Complicated systems and fragmented features make efficient fleet management more challenging.

The ClimaRunners Solution: Smart, Integrated Vehicle Monitoring for Maximum Efficiency
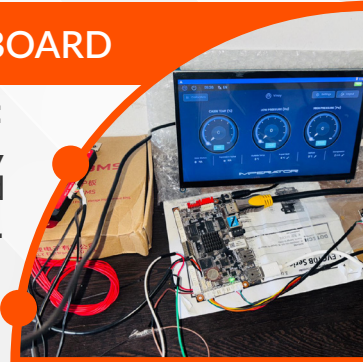
ClimaRunners offers a fully integrated platform specifically designed to overcome these challenges in fleet management. By simplifying vehicle monitoring and streamlining operations, our solution enhances real-time tracking, improves efficiency, and ensures optimal performance across your entire fleet.

Key Features of ClimaRunners' Enhanced Vehicle Monitoring App

REAL-TIME DASHBOARD

Displays essential parameters: T**emperature, Super Heat, Defrost Limit, Pressure,** and **Expansion Valve** settings.
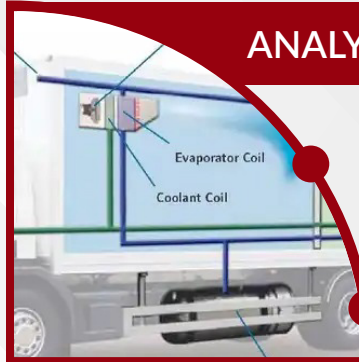
Easy-to-understand icons and color-coded indicators for quick insights.

ANALYTICS & ALERTS

Access historical trends and performance metrics.

Instant alerts for abnormal conditions like temperature spikes or pressure drops.

RESTRICTED SETTINGS FOR AUTHORIZED USERS

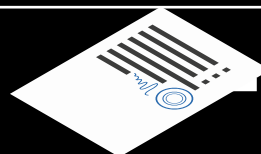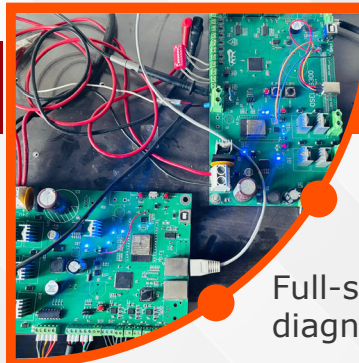Custom thresholds and parameter modifications.
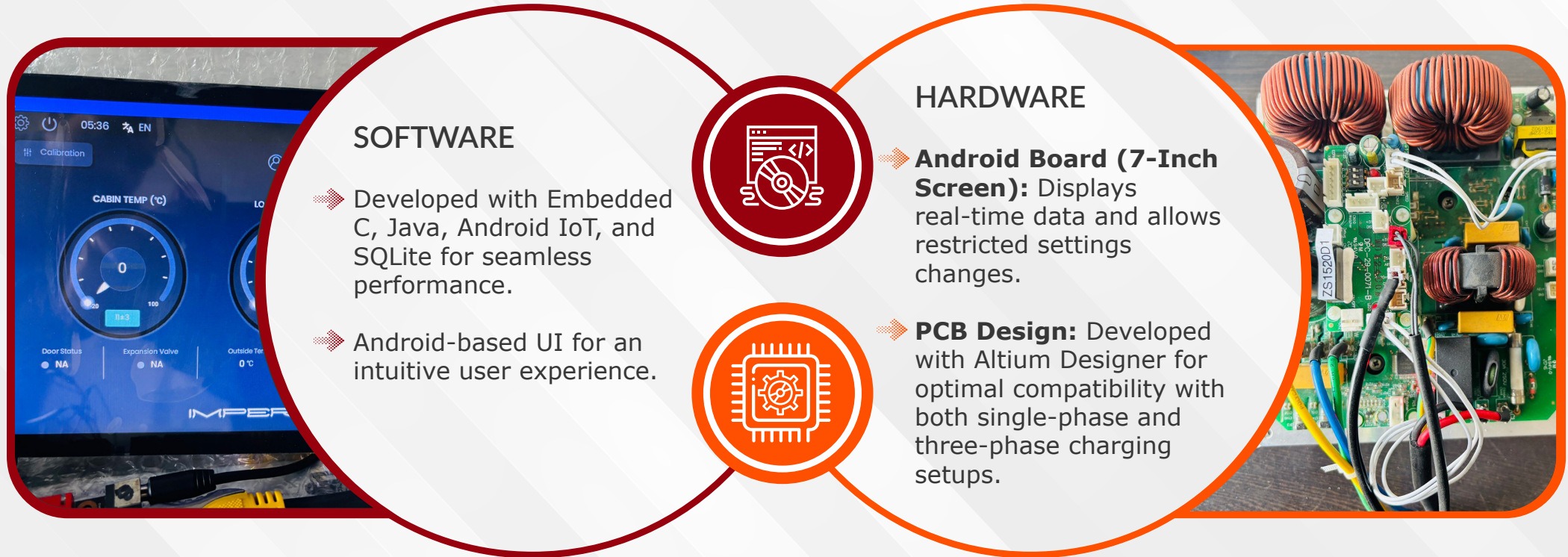
Detailed logs for audit and compliance purposes.

COMPREHENSIVE SERVICE MENU

Accessible through Basic and Advanced levels, secured by access codes.

Full-service history for diagnostics and troubleshooting.

The Technology Powering ClimaRunners:

SOFTWARE

- Developed with Embedded C, Java, Android IoT, and SQLite for seamless performance.

- Android-based UI for an intuitive user experience.

HARDWARE

- **Android Board (7-Inch Screen):** Displays real-time data and allows restricted settings changes.

- **PCB Design:** Developed with Altium Designer for optimal compatibility with both single-phase and three-phase charging setups.

How ClimaRunners Works?

A seamless, integrated system designed for enhanced fleet performance:

- **Portal Integration:** Classify users into four distinct categories: Basic Setting, Service Level Setting, Technical Level Setting, and Admin Level Setting. Assign unique identifiers to trucks and set up screens with pre-configured parameters.

- **Screens Configuration:**
  - Cabin temperature
  - Low Pressure/High Pressure parameters
  - Status of
    - ▶ Doors
    - ▶ Expansion valve
  - Outside temperature
  - Super Heat degree
  - Defrost degree

- **User Interface:** Role-based access determines user permissions for adjusting parameters. Permitted options are displayed based on access levels.

Additional Features of ClimaRunners
Designed for Safety, Scalability, and Future-Readiness

SAFETY & COMPLIANCE

Adheres to ARAI standards ensuring safety, quality, and performance for reliable operations.

SEAMLESS INTEGRATION

Compatible with various electric vehicle types and existing fleet infrastructure.

SCALABILITY & FUTURE READINESS

Future-proof and modular, allowing for simple upgrades and integrations with emerging technologies.

REGULATORY COMPLIANCE

Fully aligned with industry regulations to guarantee compliance across the board.

ClimaRunners: The Smart Solution for Fleet Management

Overcomes common challenges in electric fleet operations. Redefining electric truck monitoring with a focus on sustainability, ClimaRunners incorporates innovative features like:

Real-Time Data: Instant updates on availability, and usage.
Smart Controllers: Remote monitoring and intelligent management for enhanced fleet operations.
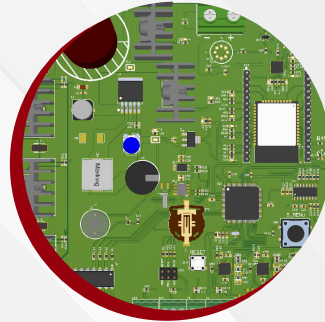
Hardware Devices for ClimaRunners

Technology:

PCB Design: Crafted using Altium Designer for superior precision, reliability, and durability.
Android Board (7-Inch Screen):

User Start Board:

- Displays key parameters at a glance, with no immediate modification options.
- Log in to access personalized settings based on user access level.
- Modification options are displayed for authorized users.

Installation Flow for ClimaRunners:

Portal: Seamlessly register users into defined access categories.
Screen Configuration: Effortlessly map screens to vehicles (e.g., trucks) using unique ID numbers, then configure their parameters.
Trucks: Map vehicle types (e.g., Truck, Van) with their specific parameters.
User Start Board: Provides real-time updates and controlled access to modify key settings.

Comprehensive EV Charging Solutions:

ClimaRunners provides a robust EV charging system compatible with electric two-wheelers, three-wheelers, and four-wheelers, supporting both single-phase and three-phase setups. Key features include:

Real-Time Parameters: Monitor critical data like door settings, defrost status and fan operation.
Battery Management System (BMS): Comprehensive tracking of battery health and energy management.

Why Choose ClimaRunners?

Real-Time Insights: Get instant updates on vehicle and environmental conditions for better decision-making.

Enhanced Analytics: Unlock powerful insights to optimize performance and reduce costs.

Reliable Hardware: Built with robust, high-quality components designed to withstand the toughest conditions.

Customizable Solutions: Tailored to meet your unique operational needs and challenges.

Sustainability Focus: Support green initiatives with eco-friendly fleet management. and reduce your environmental footprint.

Drive the Future of Vehicle Monitoring with ClimaRunners

ClimaRunners' Enhanced Vehicle Monitoring App is the game-changing solution for managing electric refrigerated and freezer trucks. By combining IoT innovation with user-centric design, we solve the industry's toughest challenges, paving the way for a sustainable future.

Ready to drive the change?

Let ClimaRunners help you power the future of transportation.

LIMITLESS
Innovation meets excellence