DFI

Enhancing City Bus Operations with DFI's In-Vehicle Computer

Background of Story

In the bustling city streets of Europe, public transportation plays a vital role in keeping urban life moving smoothly. With millions of passengers relying on city buses daily for their commute, ensuring effcient, reliable and safe transportation services is paramount for public transportation authorities across the continent.

Industry: **Public Transportation**

Application: **In-Vehicle Computer**

Solution: **DFI 10"1 Touchscreen Computer**

According to recent studies, the public transport sector in Europe has been experiencing significant growth, with a compound annual growth rate (CAGR) of 3.5% projected over the next decade.

For one such authority, a leading system integrator specialized in customized embedded and IoT solutions based in Europe, who recently won a government contract bid to upgrade local city buses, modernizing their fleet to meet the growth demands of passengers and regulatory requirements was a top priority. When they sought to upgrade their buses with advanced in-vehicle computing solutions, they turned to DFI for experise and innovation.

The Challenge

Our customer faced several challenges in their quest to modernize their fleet of city buses. Their existing onboard computer systems were outdated, lacking the processing power and features required to meet the evolving needs of modern transportation networks. Moreover, achieving compliance with rigorous regulatory standards, notably E-Mark certification and the customization of ISO 7637/ISO 16750 standards, presented a formidable challenge. Additionally, navigating the intricate realm of government bids and procurement processes proved to be a time-consuming and daunting endeavor.

The Solution

Enter DFI's in-vehicle computer – a cutting-edge solution designed to address the specific requirements of commercial vehicle applications. Featuring a 10.1" touchscreen display, robust processing power, and a range of connectivity options, it was the perfect fit for our customer's city buses.

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Pain Points

Mechanical Vibration Resistance

Enhanced Bus Driver Information

The empowered our customer to provide comprehensive bus driver information, ensuring smooth and efficient operations on city streets. Equipped with advanced features and intuitive interfaces, the enabled bus drivers to access real-time route information, passenger updates, and vehicle diagnostics with ease, enhancing their ability to deliver exceptional service to passengers.

Improved Visibility

The 1200 Nits High Brightness Screen was a game-changer for our customer's bus drivers, especially during daytime operations. With unparalleled brightness levels, the touchscreen display remained clear and visible even in direct sunlight, eliminating glare and ensuring optimal visibility of route information, passenger updates, and vehicle diagnostics. This enhanced visibility empowered bus drivers to make informed decisions quickly, improving overall efficiency and passenger satisfaction.

Driver Assistance Features

The 6-Axis IMU Motion Sensor proved to be an essential feature for our customer's bus drivers. This advanced sensor technology provided accurate motion detection and tracking, enhancing driver safety and vehicle stability on the road. With real-time feedback on vehicle movements, drivers could confidently navigate city streets, reducing the risk of accidents and ensuring passenger safety.

Regulatory Compliance

DFI went above and beyond to assist our customer in obtaining essential certifications and compliance standards for their city buses. Our expertise in E-Mark certification and adherence to customizations of ISO7637/ISO 16750 standards for automotive electronics ensured that the met the highest quality and safety standards, giving our customer peace of mind and regulatory assurance.

Streamlined Government Procurement: Leveraging Customization

DFI's dedication to product customization and adherence to industry standards, such as ITxPT (Information Technology for Public Transport), played a pivotal role in assisting our customer with government bids and procurement processes. By offering tailor-made ITxPT-compliant solutions, our customer could confidently apply for government contracts and bids without any trouble, streamlining the procurement process and maximizing their chances of success.

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The Initial Situation

By integrating DFI's in-vehicle computer into their city buses, our customer experienced a transformative shift in their transportation operations. Bus drivers were equipped with advanced information and communication tools, enabling them to provide a higher level of service to passengers. Moreover, our customer achieved full regulatory compliance, thanks to our assistance in obtaining essential certifications and standards. With DFI as their trusted partner, our customer could confidently navigate government bids and procurement processes, securing contracts and bids with ease.

DFI's Response & Results

DFI's in-vehicle computer proved to be the perfect solution for our customer's city bus fleet, offering enhanced functionality, regulatory compliance, and seamless integration into existing systems. With DFI's expertise and innovation, our customer was able to modernize their transportation operations, ensuring efficiency, reliability, and safety for passengers across Europe's bustling city streets.