Case Study

Enabling Next-gen Fleet Management

Industry
Fleet Management

Partners

KEYTROLLER

Organization

Keytroller is committed to the design, manufacture, and supply of proprietary safety devices designed for forklifts, construction equipment, aerial lifts, personal vehicles and hazardous transport trucks. Originally established in 1988, Keytroller is headquartered in Tampa, Fl.

Challenges

Keytroller created a controller specifically for forklifts. On its own, the device was quite powerful. It contained an internal logging engine, configuration parameters for the forklift (maximum speed, for example) and driver authentication.

They knew, however, that their system would be far more powerful if they could network it. If you could have one central server seamlessly manage all forklifts, it would bring operations to a whole new level. This was a difficult task because connectivity can be erratic in the field and traditional PC-based systems are simply not up to it. To make it happen, Keytroller turned to AggreGate.

Solution

The forklifts are all equipped with Keytroller controllers. Each controller has WiFi or ZigBee connectivity which it uses to connect to the central AggreGate server (LinkServer) as soon as a network connection is available. The server then synchronizes with the device transferring configuration updates and downloading the latest events.

Drivers can be authenticated with the central database, and schedule regulations can be easily complied with (i.e., “a driver may not drive over X hours per day”, even if on different vehicles). System operators can relay text messages to drivers.

When a forklift is in a well-connected area, it can be remotely controlled and shut off in an emergency.
Benefits

• Centralized tracking of accidents and driving habits
• Aggregated vehicle usage reports and cost tracking
• Predictive vehicle maintenance – schedules can be easily kept

About Tibbo

Located in Taipei, Taiwan, Tibbo Technology Inc. brings simplicity to the embedded world defined by enormous complexity of operating systems, programming languages and design tools. Tibbo’s hardware, Tibbo-BASIC programming language with its Tibbo IDE software and the AggreGate Platform offer a complete solution for delivering robust, distributed automation and monitoring systems.