

# LANTRONIX®

## INDUSTRY:

## Aviation / Fleet Management

LANTRONIX FOX3 SERIES TELEMATICS GATEWAYS  
AND QUANTUM'S FLEET MANAGEMENT SOFTWARE  
EMPOWER AIRPORT GROUND SUPPORT EQUIPMENT



### Success Highlights

- Fleet management transparency and digitization
- Analytics for improved efficiency and cost reduction
- Remote management via Web or Desktop
- Advanced encryption including AES, SSL/TLS

### Case Study Overview

By incorporating the Lantronix FOX3 series telematics gateways, Quantum Aviation Solutions of Frankfurt, Germany, can gather real-time data for its fleet management software, which is installed at airports around the world. With the FOX3 gateway, critical signals are collected and transferred to the Quantum software solution that provides immediate visibility as well as historic analysis that supports increased efficiency and reduced cost.

### CHALLENGE: Gain Reliable Data in Mission-Critical Airport Settings

Because airports are mission-critical settings, there are many requirements for technical equipment. Challenges included:

- Meeting the airport's stringent data transmission and security requirements
- Gaining access to reliable data from the Quantum Aviation vehicles at the airport
- Integrating with Quantum's software to ensure efficient fleet management

### SOLUTION: Lantronix FOX3-4G Series Telematic Gateway

Quantum chose Lantronix's FOX3 series telematics gateways for its airport vehicles primarily because of its nearly unlimited programmability possibilities as well as its interfaces for peripheral products, such as external antennas, sensors (BLE, humidity, Temperature, etc.) and NFC Readers.

The FOX3 telematic gateways are easily integrated into the dashboards of the vehicles delivering a hidden integration solution that was unlikely to be tampered with, vandalized or even noticed.

Lantronix's exceptional technical support gave Quantum Aviation the peace of mind that it would be able to integrate the FOX3 gateways and maximize their value.

### How it Works

The FOX3 series telematics solution captures vehicle data, including stops, latitude, longitude, KM/miles, fuel consumption, temperature and customized data.

Captured data is sent to the Quantum cloud-based software where it feeds a rules-based engine that provides intelligent analytics to the software users, including airport ramp managers, maintenance personnel, security staff and executive decision makers.



### Product: Lantronix FOX3-4G Series Telematics Gateways

FOX3 Series telematics gateways are configurable, smart tracking/data logging devices that can be adapted to meet user requirements. Compatible with virtually any type of vehicle or equipment, these compact all-in-one cellular devices facilitate management by enabling geo-fencing, alerts, power management and more.

For more information, visit:  
<https://www.lantronix.com/products/fox3-series/>

“ Utilizing Lantronix's FOX3 Telematic Gateway, we are able to feed reliable, real-time data to our cloud-based software solution, which gives our aviation customers critically important information for real-time visibility and actions as well as long-term analytics with guaranteed benefits. ”

– Ursula Hess, CEO Quantum Aviation

## RESULTS: Actionable Insights to Increase Efficiency and Cut Costs

Benefiting from the multiple I/Os and 2 CAN interfaces from Lantronix's FOX3 series telematics gateways, Quantum collects and securely transmits critical data from airport vehicles to its analytics software. GEO-position, vehicle access control, vehicle operation status, predictive analysis, alerts and activation of vehicle buzzers are all features Quantum can provide with the FOX3 unit. Customers benefit by increased efficiency of aircraft turnaround, reduced cost and increased billing revenues.



### Benefits include:

- Real-time data for immediate corrective actions
- Visibility by configurable alerts and status changes
- Location of vehicles worldwide
- Fact-based billing data
- Predictive vehicle maintenance information
- Fuel savings through waste alerts
- Baggage tracking at the airport
- Reckless driving alerts (GSL/ GPS jamming detection), leading to significant reduction of accidents
- Ability to show IATA security rules compliance
- RLE/BLE/I-Button for driver authorization
- Vehicle diagnostics data (CAM, FMS, OBDII and other signals)

“Lantronix FOX3 Series telematics gateways are compact, all-in-one cellular devices that enable smart tracking and reliable data logging for virtually any type of vehicle or equipment.”

– Jacques Issa, Vice President of Marketing Lantronix Inc.



### About Quantum Aviation Solutions Inc.

Established in 2005, Quantum Aviation Solutions Inc. offers standalone asset tracking as well as worldwide advanced fleet management. It is currently partnered with 50+ airlines and airports around the world.

For more information, visit <http://quantum-aviation.com>

### FOX3 Telematics Gateways Features

- Simple logistics, installation and support
- Mobile data logging, storing and sending
- Integrated wireless connectivity
- Cloud-based centralized device management
- Web or Desktop application management
- Built-in security, including secure boot
- Geofencing for equipment control
- Power management capabilities
- Advanced encryption including AES, SSL/TLS
- Alerts, status reports and history modes
- Internal and external antennas
- Compact, easy-to-install form factor
- Expandable using IOBOX-MINI, IOBOX-CAN, and IOBOX-WLAN

### Lantronix FOX3 Series Competitive Advantages

- Device configuration programming options
- Ability to define logic in the telematic gateways
- User-defined logic using LUA script
- BLE module for customized applications
- Compatibility with a variety of Web portals
- Robust technology that reduces development costs

### About Lantronix

Lantronix Inc. is a global provider of secure turnkey solutions for the Internet of Things (IoT) and Remote Environment Management (REM), offering Software as a Service (SaaS), connectivity services, engineering services and intelligent hardware.

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