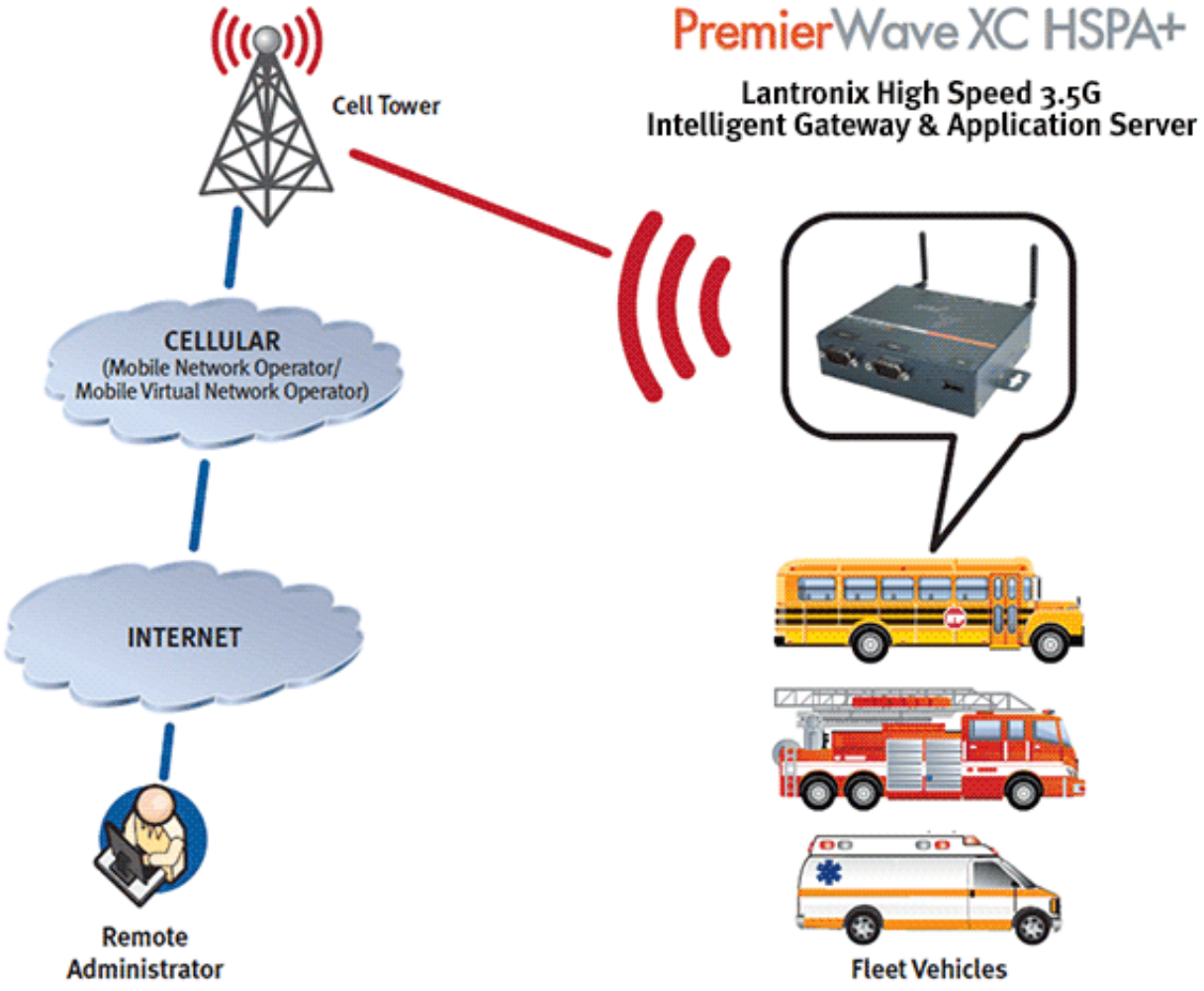
Reliable, Real-Time Fleet Vehicle Monitoring

The customer was looking for a remote network connection to their vehicle controller.



Reliable, Real-Time Fleet Vehicle Monitoring

Challenge:

The customer ? a global manufacturer of firefighting equipment and emergency response vehicles ? was looking for a remote network connection to their vehicle controller so they could remotely monitor the equipment as well as get engine

diagnostics information. Since this is a moving vehicle, the challenge was that a traditional network connection could not work nor could a Wi-Fi® connection because Wi-Fi infrastructures are not always in place where the vehicles traditionally operate.

The manufacturer needed a 3G cellular connection so that they could always connect to the emergency vehicle and maintain constant communication during a crisis. It was critical to receive and monitor the vehicle?s diagnostic data to provide early detection of problems that could take the vehicle out of service. Could Lantronix provide a high speed cellular solution that allows industrial grade remote M2M connectivity for fleet vehicles?

Key Requirements:

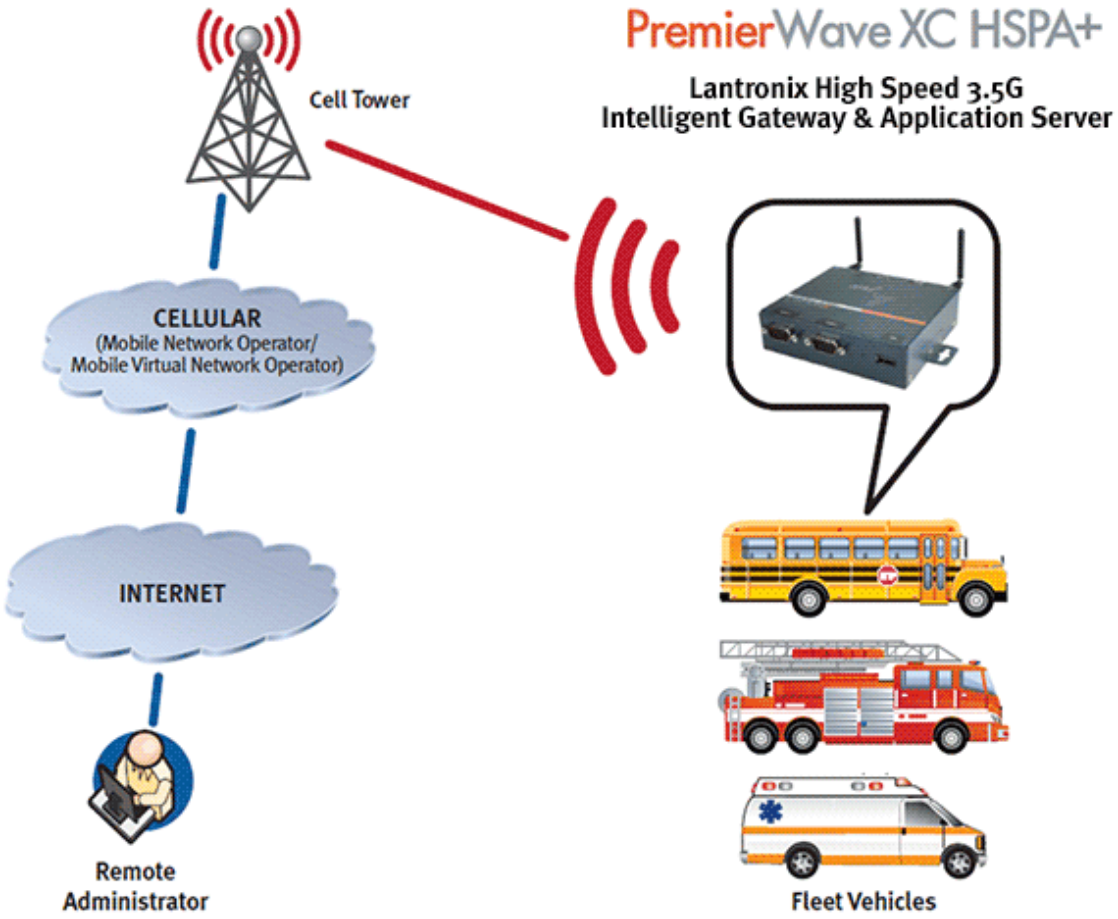
- 3G HSPA+ GSM network connection
- RS485 interface to connect to their vehicle network
- Industrial operating temperature range
- Wide power range ? voltage range to ensure that it worked with both +12v or +24v systems

The Solution:

Lantronix PremierWave HSPA+ 3.5G Industrial Cellular Solution

Selecting the PremierWave XC HSPA+ allowed the manufacturer to connect their vehicle controller via an RS485 link to a HSPA+ network. As long as the vehicle was in cell coverage, the vehicle could connect to their server and report the diagnostic information in real time. The wide voltage input range ensured that the PremierWave XC HSPA+ would work on vehicles that had +12v or +24 v battery systems.

Lantronix PremierWave HSPA+ Application ? Intelligent Gateway & Application Server



Results:

- Cost-effective by preventing maintenance delays and quality of service
- Fast response to maintenance issues through early troubleshooting
- Remote diagnostics and real-time statistics
- Centralized service support and data management
- Scalable solution as fleet grows

About the Lantronix PremierWave HSPA+

High speed 3.5G HSPA+ intelligent gateway and application server

PremierWave XC HSPA+ is an industrial grade 3.5G wireless solution offering Penta-band HSPA+ performance, network redundancy, and enterprise-level security for mission critical applications, time sensitive event tracking, and M2M connectivity.

Lantronix PremierWave HSPA+ Key Benefits:

- Penta-band UMTS/HSPA+ (Global Coverage)
- Quad-band GSM/GPRS/EDGE
- Ethernet-to-Cellular routing
- SMS: Shoulder tap, relay control, event notification, and tunneling*
- Dual network connectivity (wired Ethernet and Cellular) for flexibility and redundancy
- Unique design for quick and easy connectivity to virtually any device with a serial port
- Extended temperature range for industrial applications
- 5-Year limited warranty