



California Highway Patrol Deploys AirLink® Routers & Network Management Solution to Support New Law Enforcement Applications

A Sierra Wireless® Mobile Workforce Solution

CUSTOMER CRITICAL CHALLENGE

- Limited bandwidth of 3G solutions insufficient to support new law enforcement applications

SOLUTION

- AirLink® 4G/LTE Router/Gateway and AirLink® Management Service (ALMS)

BENEFITS

- Dramatic increase in data throughput
- Enabled CHP to support new applications (e.g. in-car video and Microsoft® SCCM)



BACKGROUND

California Highway Patrol was established in 1929 to provide uniform traffic law enforcement across the entire state, assuring the safe, convenient and efficient transportation of people and goods on the highway system. The mission of CHP is to provide the highest level of safety, service and security to the citizens of California.



"AirLink gateways have enabled us to truly extend our enterprise network to our fleet—the integration has been seamless, and has improved the productivity of our officers and the efficiency of our day-to-day operations. With automatic 3G fallback, AirLink gateways have enabled us to maintain reliable and consistent network coverage throughout the state, as parts of Northern California don't have 4G LTE coverage yet."

Sgt. Dave Barker
California Highway Patrol

Business Challenge

Since 2009, California Highway Patrol (CHP) had been relying on simple mobile data computer (MDC) terminals and Sierra Wireless PinPoint and MP 3G gateways in its fleet of 3,000 vehicles, to connect its officers to the vital data needed to carry out their jobs. This solution offered limited data capacity and supported only simple applications, such as Computer Aided Dispatch (CAD) and Automatic Vehicle Location (AVL).

In 2012, CHP began looking for an updated communications solution that would operate on 4G LTE networks to leverage carrier data plans, improve network coverage, and support the growing number of high bandwidth in-vehicle applications that were becoming available. With expanding adoption of electronic data management, many courts and partner organizations had started to mandate online bookings, reporting and electronic records. This online functionality was not supported by the limited bandwidth provided by CHP's 3G gateways—as a result, officers had to return to the station to complete their paperwork electronically, taking them off the road and reducing their time spent protecting the public's safety.

Given the large geographical nature of California State, CHP needed a solution that was able to operate on multiple carriers to ensure reliable and consistent coverage.

Sierra Wireless AirLink® Solution

AT&T proposed a solution to CHP that bundled monthly service and hardware, and recommended Sierra Wireless AirLink® Gateways with Wi-Fi capability. Given their long standing relationship with Sierra Wireless, CHP decided to move forward with AirLink Gateways and had them certified by the Office of Emergency Services (OES) and Public Safety Communications Office (PSCO) before deploying them on AT&T's network in approximately 2,500 of its vehicles.

Results

CHP began the installation in 2016, connecting the gateways to their in-vehicle Toughbooks, and saw an immediate increase in data throughput, which enabled them to pilot new, high bandwidth applications such as in-car cameras and electronic ticketing, with automatic data downloading.



The exponential improvement in data capacity enables CHP's officers to be able to run sophisticated applications using its enterprise systems management platform—Microsoft SCCM—directly from their in-vehicle Toughbooks. CHP officers can submit online records, access rich GPS data, and complete criminal reports and ticketing all while in the field, vastly increasing their responsiveness and effectiveness.

"AirLink gateways have enabled us to truly extend our enterprise network to our fleet—the integration has been seamless, and has improved the productivity of our officers and the efficiency of our day-to-day operations," says Sgt. Dave Barker. "With automatic 3G fallback, AirLink gateways have enabled us to maintain reliable and consistent network coverage throughout the state, as parts of Northern California don't have 4G LTE coverage yet."

CHP is also implementing a centralized network management platform from Sierra Wireless to support its fleet of gateways—AirLink Management Service (ALMS)—and is already seeing many benefits. The team can now conduct remote, over-the-air updates and mass device configuration and control, troubleshoot and increase network security—all without having to take a vehicle off the road.

Looking ahead, CHP has plans to leverage the Wi-Fi capability of AirLink Gateways to keep officers connected when outside of the vehicle, such as tablets and body-worn cameras. CHP is also considering deploying other AirLink routers that offer multiple Gigabit-Ethernet ports and Gigabit Wi-Fi, to reliably connect additional wired and wireless devices in the vehicle area network (VAN).

Contact USAT for AirLink Solutions



605 Eastowne Drive
Chapel Hill, NC 27514
Phone: (888) 550-8728
Email: info@usatcorp.com

About Sierra Wireless

Sierra Wireless is building the Internet of Things with intelligent wireless solutions that empower organizations to innovate in the connected world. We offer the industry's most comprehensive portfolio of 2G, 3G, and 4G embedded modules and gateways, seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide trust our innovative solutions to get their connected products and services to market faster. Sierra Wireless has more than 1000 employees globally and operates R&D centers in North America, Europe, and Asia.

For more information, visit www.sierrawireless.com.