



Snow Grooming and Forestry Equipment Relies on the Rugged AirLink Raven XE for Connectivity in Harsh Field Environments

Bracke Systems AB of Östersund, Sweden provides Global Positioning System (GPS) / Geographic Information System (GIS) management solutions that increase the performance and efficiency of fleet vehicles in the field. Bracke Systems' software applications service forestry, ski resorts, municipalities and transport/logistics companies, as well as the defense and agriculture industries. The company is a sister company of Bracke Forest, which has manufactured forestry equipment and machines since 1922 and has a worldwide base of dealers and customers.

BUSINESS CHALLENGE

Bracke Systems' Fleet Management Platform (FMP) is a solid software platform that has been developed in close cooperation with Bracke's customers and subcontractors. The Bracke FMP integrates all necessary information into a digital map viewable on an in-vehicle computer or handheld device with built-in GPS, such as an Ultra Mobile Personal Computer (UMPC), Smartphone or Personal Digital Assistant (PDA). Fleet operators use the platform to track and manage their field vehicles using real-time data to more efficiently dispatch vehicles or provide service based on location and availability.

"Our customers operate in industries where communication and production scheduling are top priorities," explained Per Persson, in the Hardware and Sales organization at Bracke Systems. "Our solutions ensure that our customers are able to optimize utilization of their vehicle fleet, thus simplifying the entire logistics chain – from planning, through production, to reporting."

Bracke Systems has developed GPS/GIS solutions for field vehicles such as forestry machines and snow groomers, which require a rugged solution infrastructure for use in harsh outdoor environments. In order to access the digital mapping and tracking information, the Bracke FMP solutions require access to a secure, reliable Internet connection for remote, two-way data transmission. Originally using just a 3G USB stick for connectivity and security, Bracke Systems was disappointed with the wireless broadband adaptor's performance, which is not suited for industrial applications. "The standard 3G USB stick we were using did not work very well," said Persson. "We needed a connection that was more reliable."

To find a more effective solution, Bracke turned to Communica, a value-added distributor for Sierra Wireless communications products, located in Stockholm. The expert team at Communica analyzed the business challenge facing Bracke and suggested the company trial the AirLink™ Raven XE intelligent communications gateway from Sierra Wireless.



AIRLINK RAVEN XE



POWERED BY: ALEOS

APPLICATION: TRANSPORTATION

CUSTOMER CRITICAL CHALLENGE:

- Field vehicle tracking and management platform requires access to real-time data
- Required secure and reliable connectivity in harsh environments

SOLUTION:

- AirLink Raven XE gateways provide high-performance, 3G data access in alpine and forestry areas

BENEFITS:

- Reliable, real-time access to critical data
- Easy configuration, remote management and troubleshooting



Bracke Systems AB

SIERRA WIRELESS AIRLINK™ SOLUTION

“With the hands-on support of Communica, Bracke Systems began testing the AirLink Raven XE as a replacement for the wireless adaptor. The Raven XE is built on a powerful platform and processing environment that provides remote monitoring and two-way communication required for commercial mobile or portable network connectivity applications.

The Raven XE allows remote data collection, and its compact form factor enables integration within existing infrastructure and enclosures. The rugged design of the Raven XE, as well as the wide temperature ranges in which it can operate, ensures the gateway is strong enough to perform in the harsh field environments where industrial vehicles regularly operate. In addition, the ability to run a high gain roof mounted antenna from the Raven XE helps ensure sufficient 3G coverage even in remote locations.

“We needed a reliable connection to the Internet, and the Raven XE suited our solution,” said Persson. “We mounted the device in a groomer on an alpine resort, where the environment and distance can provide challenges, but the AirLink Raven XE does the work more than well.”

The Raven XE gateway is powered by ALEOS™ embedded intelligence for reliable and feature-rich operation, enabling remote configuration, packet level diagnostics and network session persistence.

In addition, the device features the ACEware™ suite of tools and utilities to simplify the provisioning, managing and troubleshooting of remote equipment, enabling Bracke Systems to monitor and control its network of wireless gateways in one central location. Together, ALEOS and ACEware comprise the AirLink Control Environment (ACE) and enable customers to seamlessly deploy complex solutions with very little programming.

“We used the ACEware tools to do the installation and customer configuration of the Raven XE devices, and that passed through fast and easy,” explained Persson “The integration and connection management is easy to handle because you only do it once.”

RESULTS

With the guidance and support provided by Communica, Bracke was able to deploy a solution that has more than met their needs. The Raven XE solution has improved performance and simplified the deployment and management of industrial vehicles in remote locations.

Bracke Systems has deployed about 16 AirLink Raven XE gateways in the field, in both alpine environments and forestry areas, running on Europe’s 3G HSPA networks. The Raven XE is an integral part of a total solution package - also including the Bracke FMP-based PisteGIS software, a ruggedized computer and an external GPS antenna - delivered to Bracke Systems customers.



“Connectivity failure is no longer an issue ... Our customers can now focus on their work instead of the connection device.”

Per Persson
Hardware and Sales
Bracke Systems



Bracke Systems AB

RESULTS (CONT'D)

“Since we are a subsidiary of a larger organization, the inherent financial stability allows us to focus on innovative product development,” concluded Persson. “Since we need hardware to help our software, it’s a natural process to expand our integration with solutions like the Raven XE gateway in parallel with our software development.”

The Sierra Wireless AirLink Raven XE intelligent communications gateway running on 3G HSUPA networks has provided Bracke Systems with the following benefits:

- **Reliable connectivity** – ALEOS intelligence provides “always-on” and “always-aware” connectivity required for critical mobile data applications.
- **Rugged form factor** – The rugged design and broad temperature range of the Raven XE enables high performance in the harshest of environmental conditions.
- **Quick activation** – Deeply integrated with ALEOS, ACEware tools allow for quick and easy configuration and troubleshooting of remote Raven XE gateways in the field. The Raven XE intelligent gateways are ready for deployment with out-of-the-box configuration and management tools – no AT commands or programming language to learn.
- **On-demand access to real-time information** – Intelligent, 3G cellular solution offers reliability and immediacy provided by real-time two-way communication data available anytime, and accessed from anywhere in the world.
- **Portability** – The wireless Raven XE gateway allows for plug-and-play re-deployment if vehicles are retired or temporarily out.



FOR MORE INFORMATION:

North America & Asia

Tel: +1 510 624 4200

Europe, Middle East & Africa

Tel: +33 1 46 29 08 00

Asia Pacific/Australia

Tel: +61 3 9207 9400

E-mail:

AirLinkSales@sierrawireless.com

www.sierrawireless.com