### **Industry Use Case**

#### Challenge

It is hard to establish common visibility and integration of different mobile assets across the organization.

#### Solution

Using FogLAMP in conjunction with the PI System as a common System of Record, along with a fit-forpurpose gateway, enables collection and management of data in a consistent manner for all operations and systems.

#### **Benefits**

Reduce Maintenance costs through Condition-based Maintenance (CBM)

Quickly integrate new assets

Improved Operational visibility

Flexible data collection and user experience

Integrate additional I/O

Improved uptime and asset utilization

Provides maximum flexibility for granular data collection and user experience

Small compact footprint

## **Business Challenges**

In today's complex operations there are many elements that make up a holistic and resilient supply chain. Some transportation or fleet assets are often overlooked due to complexities and challenges to gain time-series data in a reliable manner or integrate with other in-cab applications. This includes both vehicle operational parameters and other attributes of its load or additional mechanical capabilities, like a lift/swing arm or onboard compressor.

- Operators are subject to scheduled based maintenance without understanding contextualized Asset Availability or Overall Equipment Efficiency (OEE)
- Creating visibility affords operators with improved Conditional Based Maintenance (CBM) and this are able to reduce unscheduled downtime by early detection of shifts in real-time asset operating conditions
- Problem detection and Quicker Troubleshooting. Understand of OOE helps operators provide the ability to capture critical real time conditions



### **Business Impacts**

- Operators are able to Integrate real time equipment data with planning and scheduling tools for dynamic plan recovery
- Streamlined fleet management, including; maintenance costs, increased asset availability and smarter capital expenditure planning
- Consistent integration with any asset management system
- Single solution for truck, trailer and other operational equipment







## **Solution Approach**





Collect Data from local sensors Aggregate – combine and organize data Transform – filter and curate data Buffer – store and forward to protect from data loss Edge Analytics – enhance raw data Deliver information to the PI System via OMF

Super slim and ruggedized design

Intel Atom® processor Bay Trail E3815 (1.46GHz) Built-in 1 x CAN 2.0B, optional SAE J1939/ J1708 module Smart power management with Ignition on/off delay via software control and low voltage protection

- Built-in U-blox M8N GPS
- Dual SIM cards for WWAN modules
- Wide range DC input from 9 ~ 36V
- Wide operating temperature -40°C ~ 70°C
- Certified by CE/ FCC/ E13 mark



With	A bundled offering, it's easy to gather data
Self-service Data Access	Anybody familiar with the PI System can quickly and easily publish data from transportation assets and receive labeled patterns of asset operation in response.
Native Integration to PI	FogLAMP natively works with PI and can collect, process and send through many transport layers
Easy to Order & Off the Shelf Ready	Nexcom VTC 1910
Fully Integrated, Tested and easy to Configure	FogLAMP processes the data and prepares it for your PI system. Hardware ships ready to plug in and configure.

# Summary

COTS, flexible and low-cost solutions for delivering SAE-J1939/1708 and associated equipment data to the PI System delivering a consistent approach across all your equipment. VTC 1910-S (P/N: 10V00191002X0)

Contact <u>info@dianomic.com</u> for pricing and licensing of FogLAMP Contact <u>sales@Nexcom.com</u> for volume pricing and delivery information.



