

LEADING PRODUCT INNOVATIONS

Vehicle Information Platform

Applus Increases the Value of Mobile Assets, Driving Costs Down and Returns Up

Competitive market forces, rising costs for fuel, insurance and maintenance, coupled with heightened safety and environmental concerns, compel any organization to ensure mobile assets deliver the greatest possible return on investment.

Applus Technologies, Inc. has leveraged its expertise as a global leader in vehicle diagnostic and emissions testing technologies to engineer a robust solution for managing mobile assets and driving efficiencies across an organization.

The Applus Vehicle Information Platform (VIP) solution is a unique integration of multiple technologies, customized to meet your mobile asset management needs. The VIP solution leverages next-generation technology with universal communications and a robust business intelligence platform to turn raw vehicle and equipment data into a powerful business tool.



Applus VIP



Fully Customized Vehicle Information Platforms

The Applus VIP solution is flexible and easily customized to manage small and/or large fleets of cars, light and heavy-duty trucks, construction equipment, off-highway vehicles, generators and marine craft. Each VIP solution is custom engineered to target and support your critical asset management needs such as workforce productivity, vehicle routing and scheduling, cost-effective maintenance, insurance management, fuel efficiency and resource allocation.

Key Benefits:

- Reduced equipment operational costs
- Lower fuel consumption
- Reduced maintenance costs and vehicle downtime
- Improved asset tracking (with on-board GPS)
- Enhanced driver safety
- Enhanced compliance and reporting
- Improved service levels
- Increased operational visibility
- Reduced environmental impact

The VIP solution uniquely integrates a custom engineered transponder—the Applus Tracker—with a state-of-the-art control center and a best-in-industry business intelligence platform.

The A+ Tracker

The A+ Tracker is a user-installed wireless transponder, which integrates GPS and accelerometer engines. This transponder is compatible with all OBDII compliant vehicles and captures and remotely

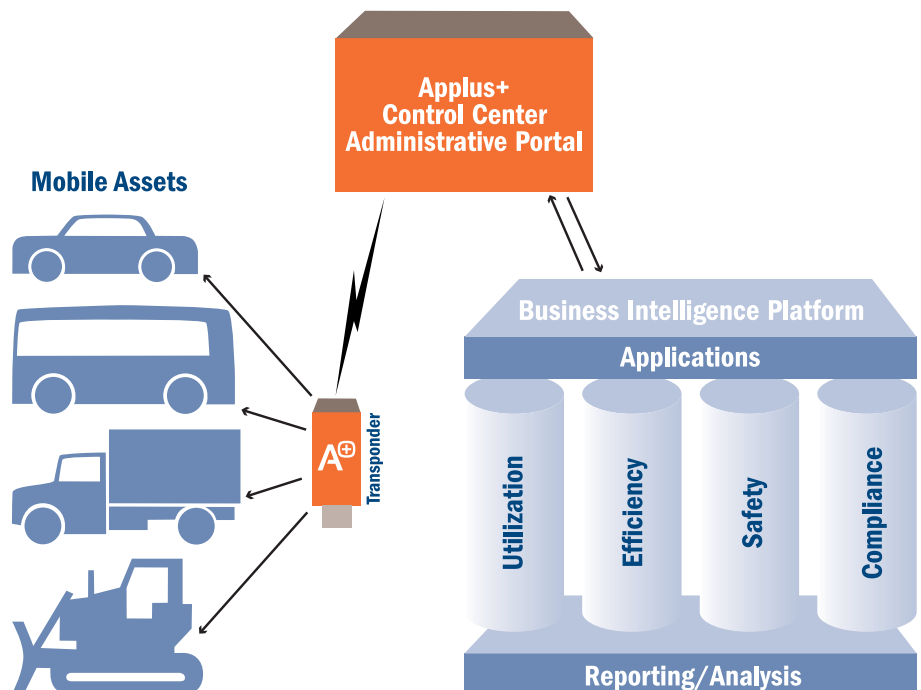
transmits hundreds of data points on vehicle and asset performance, as well as data on driver performance and routes driven.

A+ Tracker is manufactured by Applus for use in the U.S., Europe, Canada and Latin America. It connects to an asset's built-in, on-board diagnostic (OBDII, J1962 connector) port, meets Society of Automotive Engineers (SAE) specifications for a J1978 scan tool and supports all vehicle communication protocols, including CAN, KWP, ISO, VPW, and PWM. For heavy-duty vehicles, transponders can be customized with J1708/J1587 or J1939 connections. By utilizing the standardized diagnostic port, the transponder can query the on-board computer(s) in any asset possessing an OBD interface, including all OEMs and heavy-equipment manufacturers such as Freightliner, Caterpillar, Komatsu, Hitachi and John Deere.

The A+ Tracker is extremely efficient—it's easily installed and requires very little power to operate. Importantly, it can be

remotely updated or reprogrammed, which allows real-time changes in the types of data collected and/or software upgrades. The A+ Tracker features a data logging capability, which stores information in non-volatile memory that can be augmented using Secure Digital (SD) or microSD cards for larger data storage needs. The unit also incorporates Applus fingerprint technology, which locks an asset's "fingerprints" or unique identity and triggers an alert if the A+ Tracker is removed or tampered with.

Applus offers multiple transmission options, which accommodates virtually all business models and unique customer needs. Data transmission options include cellular (GSM & CDMA bands), Bluetooth, Zigbee, WPAN, Wi-Fi, ISM band, Infrared, USB, RS232, RS422/RS485, Satellite and Ethernet. The A+ Tracker also includes GPS tracking capability, providing a dynamic and effective location-based monitoring solution for improving workforce and asset utilization.





Multi-Industry/Application:

- Government agencies
- Commercial fleets
- Heavy-duty fleets—on highway
- Insurance (UBI)
- Fleet leasing, rental agencies
- Construction (heavy equipment)—off highway
- Energy: oil, gas, utilities
- Marine
- Waste management
- Vehicle inspection programs
- Public transit

State-of-the-Art Control Center

The Applus Control Center is the web-based portal through which customers manage their mobile assets. Notably, both the Control Center and Business Intelligence Platform support multiple languages, as do all Applus solutions.

The A+ Tracker securely transmits encrypted data to the Control Center, which provides the key features for data warehousing—built-in redundancy, encrypted data transmission and audit trails.

Applus provides a suite of management applications, all of which can be customized to support your specific business needs. These robust applications enable you to easily activate one or all A+ Trackers, assign individual operators per asset, design rules with custom benchmarks to your business metrics and establish proactive alert notifications.

The Control Center integrates the A+ Tracker data with existing vehicle fingerprint or other historical data for business intelligence processing, such as trend analysis and statistical reporting. The robust data warehouse functionality works seamlessly with your information management systems to provide a comprehensive tool that reduces manual processes and increases overall business value.

Business Intelligence Platform

The Applus Business Intelligence Platform (BIP) translates the deluge of data collected in the Applus Control Center into practical business analyses that empower you to effectively evaluate and better manage mobile assets.

Asset and Workforce Utilization

Built-in GPS allows asset managers to automate resource allocation. Live tracking and mapping increases routing efficiencies, helps limit or eliminate unnecessary travel and reduces fuel consumption. The Applus BIP allows customers to establish geo-fences and time-of-day monitors that will detect improper or unauthorized usage or theft.

In addition, VIP improves business operations as improved asset management allows you to be more responsive and effective in serving your own clients with more efficient—and timelier—routing and scheduling.

Maintenance and Fuel Efficiency

Monitoring vehicle diagnostic and fault codes can be used to automate maintenance scheduling, preventing costly breakdowns and increasing fuel efficiency. Customers can design maintenance schedules per asset, based on such factors as mileage, hours of use and fuel and oil consumption. As pre-set limits or thresholds are approached, managers can proactively notify operators and schedule timely maintenance and/or repairs.

In addition, the Applus BIP allows you to monitor and manage a number of factors that determine fuel efficiency, such as idling time, start and stop times and location of idling. This information allows managers to analyze historical data and averages, identify issues and implement corrective measures. For example, policies and procedures to reduce idle time, enforce smart driving habits and minimize unauthorized after-hours use will improve fuel efficiency. In addition, integrating data on real-time asset location and fuel purchase time and allows managers to easily detect fraudulent fuel expenses.



Applus VIP



Safety and Driver Profiling

Monitoring safety factors and driver behavior helps our customers manage this critical issue and the historical reporting and documentation can help reduce your insurance costs. Real-time tracking of operational factors such as vehicle speed, seat belt use, sharp turning, hard

Compliance Application

The Applus BIP automates a number of expensive, time consuming reporting requirements of the U. S. Department of Transportation and Federal Motor Carrier Safety Administration, including hours of service reporting, accident and incident tracking, vehicle and asset safety checklists, emissions and safety monitoring and fuel tax (IFTA) reporting. This automation helps eliminate manual paperwork and avoid costly audits or fines. Importantly, the Applus BIP can also send mobile alerts to notify operators or management of non-compliant behavior and violations of the business rules you established via the Control Center. Alerts may include geo-fencing or safety violations, excessive idling or stopping, accidents (e.g. air bag deployment) and/or engine problems.

Applus

As a global leader in vehicle technologies, Applus has a unique understanding of how valuable a robust mobile asset management solution can be to your business. The Applus Vehicle Information Platform optimizes the value of mobile assets and helps organizations to meet today's evolving strategic, financial, operational and regulatory compliance challenges. Our leadership in customized system solutions and machine-to-machine communications strengthen your organization's ability to effectively address today's competitive market.

stopping, engine RPM and rapid acceleration allows managers to evaluate individual operator behavior against posted speed limits and road conditions. The reporting function provides documentation for imposing penalties or corrective measures for unsafe behavior.

Evaluating Options:

- What is the business application?
- Do assets or resources need to be managed on a real-time basis?
- Are assets mobile or static?
- Is data access required on a real-time or delayed basis?
- Do assets return to a centralized location for data collection on a scheduled basis?
- What is the budget?

Applus⁺
Technologies

VIP-PF-11-03-R1

444 North Michigan Avenue
Suite 1110
Chicago, IL 60611
phone: 1-847-616-6122
email: solutions@applustech.com



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