Powerful Cloud-based ATMS with Unparalleled Forecast Capability

Delivering New Levels of Traffic Signal Control and Intelligent Automation
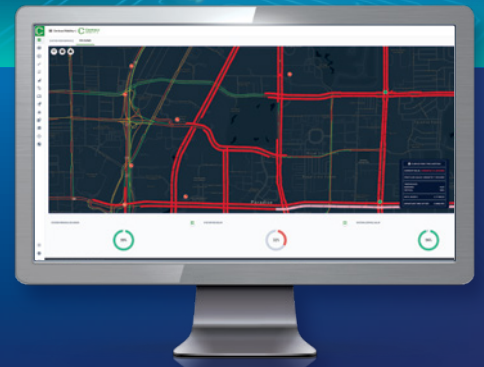
Overview

Econolite's **Centracs® Mobility Platform**, the industry-leading, secure, flexible, cloud-based Advanced Transportation Management System (ATMS) now integrates **PTV Flows**, the cutting-edge, predictive traffic management solution that leverages Machine Learning (ML) and Artificial Intelligence (AI) to forecast travel times without the need for any detection hardware, enabling proactive signal control decisions seamlessly across your road network.

Centracs Mobility, now with PTV Flows, is the ONLY ATMS capable of moving traffic signal optimizations from reactive to proactive. Our new Traffic Proactive optimization module is layered on top of existing capabilities for data analytics and reporting, signal/detection management, additional optimization services, and much more.

Traffic Proactive Module

The Traffic Proactive module represents a revolutionary advancement for the Centracs® Traffic optimization services. It leverages the most extensive historical traffic database, PTV's industry-leading forecasting model, and the power of Econolite's Centracs® Mobility ATMS to deliver real-time situational awareness and travel time predictions up to one-hour in advance throughout your entire roadway network. When integrated, the Centracs Mobility Platform can proactively optimize signal timing without traditional detection by leveraging the power of big data and AI. The capability to leverage future travel time predictions for signal timing to mitigate bottlenecks before they occur is now a reality with the convergence of Econolite and PTV technologies. By leveraging predictive traffic management capabilities, the solution helps traffic departments shift from reactive to proactive traffic signal optimizations. This proactive approach not only saves time spent on manual adjustments but also reduces costly congestion-related delays. By integrating predictive capabilities into signal timing optimization, departments can reduce response times to traffic incidents, saving time and minimizing disruptions.

Enhanced Key Features

- *Advanced Machine Learning:* Integrates a cutting-edge, self-learning, self-improving AI model that leverages the largest set of historical traffic data available, ensuring continual refinement and accuracy for predictions.

- *Detectorless Insights and Control:* Use current and future travel times available in Centracs® Mobility and get instantaneous insights and signal optimization without the need for costly hardware deployment, operations, and maintenance.

- *Predictive Traffic Insights:* Delivers real-time and predictive traffic analyses, offering up to an hour of forward-looking travel time forecasts across your road network, enhancing proactive decision-making and situational awareness.

- *Automated Traffic Management:* Enables dynamic corridor analysis for future travel times, supporting automated adjustments in timing plans, including cycle times, offsets, and signal splits, to optimize flow and reduce congestion.

- *Unmatched Scalability and Data Depth:* Powered by TomTom's extensive historical traffic database—the largest in the industry—this feature offers unparalleled scalability. It taps into trillions of data points from years of aggregated floating car data, covering 84 countries and over 15% of all traffic movements, for deep, actionable traffic insights.

Umovity

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Econolite Centracs® Mobility Platform

Econolite leads the industry in providing ATMS solutions for hundreds of customers across North America, controlling tens of thousands of signalized intersections with the Centracs® Mobility platform. The Platform has continually evolved with the industry, adapting to both day-to-day operational demands and providing leading-edge solutions for the emerging needs of transportation, to ensure the highest levels of safety, system reliability, and optimized mobility. Econolite's Centracs Software Suite is comprised of both Econolite's on-premise and cloud-based ATMS solution, affording agencies incredible flexibility in deployment while delivering the most functionality in the industry. The Centracs Mobility Platform's adaptability and flexibility ensure streamlined operations in response to evolving transportation needs. This adaptability reduces downtime for system upgrades and maintenance, saving time and ensuring continuous traffic management effectiveness.
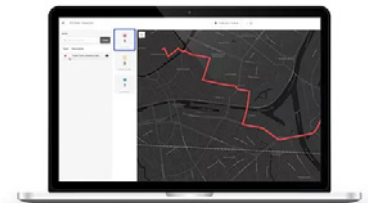

On-premise and cloud-based ATMS solution
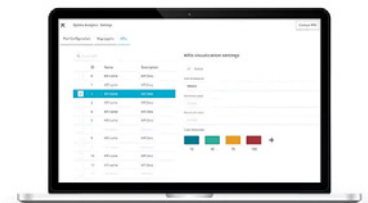
PTV Flows

Flows allows traffic operators to effortlessly monitor and predict traffic in real-time. By leveraging machine learning, state-of-the-art algorithms, and automatic alerts, PTV Flows enables cities and road authorities to optimize their traffic management without the need for extensive resources or complex infrastructure. Therefore, PTV Flows comes with a network map that is updated automatically and floating car data from TomTom with extensive coverage. The automatic alerts help traffic operators to proactively manage traffic, reduce the length of delays, and increase the efficiency of the transport system. This leads to optimized signal timings, reduced bottlenecks, and improved traffic flow, saving time and fuel costs for commuters. Leveraging TomTom's extensive historical traffic database, the solution offers unmatched scalability without additional costs for data acquisition. Traffic departments can tap into comprehensive data insights, enabling them to scale operations efficiently and respond effectively to changing traffic patterns.

Self-Updating Traffic Forecasts

Predictive Automatic Alerting

Customization and Flexibility

Scan the QR code to request a demonstration

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