

Cloud-Based Advanced Traffic Management System

11

2/2







Product Overview

Since 2009, Econolite has led the industry in providing Advanced Transportation Management System (ATMS) solutions for hundreds of customers across North America, controlling tens of thousands of signalized intersections with our Centracs® Mobility platform. The Centracs Mobility 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, such as the Connected Vehicle (CV) environment, to ensure the highest levels of safety, system reliability, and optimized mobility.

The Centracs Mobility platform is our collective solution for transportation systems needs and is comprised of our on-premise solution (Centracs) and our cloud-based solution (Centracs Mobility). Centracs Mobility affords agencies incredible flexibility in deployment while delivering the most functionality in the industry. Additionally, the platform can be utilized in a hybrid capacity delivering both on-premise and cloud-based services to distribute operations and providing an ease of transition for existing customers to the cloud if so desired.

Centracs Mobility's secure, cloud-based Software-as-a-Service (SaaS) platform leverages Microsoft Azure cloud computing services to provide FedRAMP-compliant data storage for agencies, the highest level of data security in the industry. Centracs Mobility also delivers comprehensive, modular traffic signal control and intelligent automation. It allows agencies the ability to deploy desired functionality ranging from just the Essentials to a full Enterprise suite, or a suite customized to specific needs. Centracs Mobility offers advanced capabilities including Signal Performance Measures (SPM), arterial pattern optimization, data driven adaptive signal control technology, and advanced features for signal priority.



Available Modules

The Centracs Mobility platform offers agencies a variety of traffic management tools and the ability to customize, including the data analytic capabilities of Signal Performance Measures (SPM), signal status and display, or automated data reporting for Autoscope® Vision video detection sensors. Centracs Mobility offers the following modules:

SPM (Signal Performance Measures)

Provides rich data analytics, leveraging the high-resolution data capabilities of advanced transportation controllers. Supports decision making that enables development of performancebased operations and maintenance strategies.

+Detect

Automates data reporting, analytics, and monitoring for Autoscope Vision video detection systems. It captures and leverages high-resolution data collected by these sensors.

Device Management

Provides basic intersection status display and remote front panel access to Econolite controllers.

Intersection Control

An intuitive enterprise-class system, providing powerful and flexible ITS management, traffic control, and data sharing in a single, easy-to-use platform. Functional elements Include: scheduler, map editor, and traffic responsive.



Signal Performance Measures User Interface



+Detect User Interface



Intersection Control User Interface



Traffic Management

Designed to provide real-time transportation monitoring and control capabilities, Traffic Management is a powerful ATMS platform. It provides breakthrough V2X smart intersection and traffic control capabilities, including supporting connected and automated vehicles. Provides expanded features for power users, including action sets and alert escalation.

Timing / Pattern Optimizer

Leverages high resolution traffic data over user selectable periods to generate performancebased traffic signal timing strategies that reduce congestion and eliminate retiming project costs. It optimizes traffic signal coordination, reducing travel times while increasing safety.

Interoperability

Provides support for installed non-Econolite controllers. The module offers a generic NTCIP 1202 Database Editor, enabling a user to edit and modify any compliant standards based NTCIP 1202 controller.

DMS (Dynamic Message Signs)

Designed to provide complete control of DMS, including instantaneously updating new messages. Vital traveler messages can be uploaded and downloaded to the sign or configured to automatically update.

Edaptive

The next-generation in adaptive signal control, optimizing cycle, offset and splits in real-time. It is built upon Econolite's latest cloud-based Centracs Mobility SPM and revolutionary Pattern Optimizer solutions.

· C1	C-10			
-			and and a second s	
		01/10/-0	-	
		they find an inclusion of the second		. +
		Text Text 10		-
	111 In	101-100-10		*
10000		ALC: NO. 10 (1977) 10 (10)		4
the fact has to		No. No. Including the state of the state		
		area - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -		· · · · · · · · · · · · · · · · · · ·
-	-	The Decision of Colored		
-	-	The second se		
	10.000 C	the second se		
	-	100 (million)		
				-
_	- 10			
				2
			1.0	
_				5
_			-	
_				
			-	

Interoperability User Interface

A tase C little*	nes Cittar					
		· · · · · · · · · · · · ·				
Part Service Party	···· 0	*7	···	4 mm		
The Address of Sectors				and and a second		
*				annan annan		
- to design it would				and a second second		
in any company				and the second second		
-						
The Association of Concerning			175	0. 0. 0. 0. 0. 0. 0. 0. 0. (10) (10) (10) (10) (10) (10) (10)		
a more age				And the past that and the		
		***		and was and and must		
****		**2	**3	and and and and must		
****				A A A A A A A A A		
				and and and and and and and are and a dr dr dr dr dr dr dr dr	;	
**************************************				and and and and and and and are and a dr dr dr dr dr dr dr dr		
				the test the test test.		

Edaptive User Interface



Maintenance Management System User Interface



Priority Control User Interface

Video

Provides enterprise-class IP video surveillance that enables the visual monitoring of intersections and roadways. It provides seamless management of digital video across IP networks, supporting a broad range of cameras.

Maintenance Management System

A centralized GIS-based asset management, maintenance, and technician support cloud software solution and includes a fully functional smart device application. Works seamlessly with ATMS systems to actively manage field assets, reactive and preventative maintenance, and performance measures programs.

Priority

Provides significant efficiency improvements over traditional emergency vehicle preemption and transit signal priority systems. It leverages in-vehicle GPS and existing AVL systems to calculate vehicle ETA at each signal with multiple classifications and priority levels. Agencies can cooperatively develop business rules for the operation of the system.

Integrated Corridor

Leverages the high-resolution traffic data collected to apply coordination strategies in response to incidents or events to mitigate traffic congestion and proactively avoid backups.

Centracs Mobility Suites

Centracs Mobility offers five software suites that incorporate various modules with increasing levels of functionality, including a completely customizable option that provides agencies with a customized One-Stop-Shop traffic management solution. **All suites include SPM, +Detect, and Device Management.**

	SUITES							
MODULES	Essentials	Standard	Signature	Enterprise	Custom*			
SPM	✓	✓	✓	✓	✓			
+Detect	✓	✓	✓	✓	✓			
Device Management	✓	✓	✓	✓	✓			
Intersection Control		\checkmark	\checkmark	\checkmark	*			
Traffic Management		\checkmark	\checkmark	\checkmark	*			
Timing/Pattern Optimizer		\checkmark	\checkmark	\checkmark	*			
Interoperability		\checkmark	\checkmark	\checkmark	*			
Edaptive			\checkmark	\checkmark	*			
DMS			\checkmark	\checkmark	*			
Video			\checkmark	\checkmark	*			
MMS				\checkmark	*			
Priority				\checkmark	*			
Integrated Corridor				\checkmark	*			

*Specific solutions can be customized to fit the unique needs of our customers.

ECONOLII



Econolite Systems, Inc. (ESI) delivers industry-leading turn-key services across the complete ITS project life cycle – from design through maintenance and operations. Focusing on infrastructure-based ITS solutions, our capabilities extend to freeway and arterial applications, and new data platforms. We support agencies at both the state and local level and serve as their provider of choice for systems software, communications, integration, installation and maintenance for a broad array of ITS field devices, including Connected Vehicle technologies. Our Team of licensed Civil, Electrical, Software, and Systems Engineers are ready to address your project design and integration project requirements.



www.econolite.com



714-630-3700

1250 N. Tustin Avenue, Anaheim, CA 92807

CNTRC-MOB 02.2024

©2024 Econolite. All rights reserved. Econolite reserves the right to change or update these specifications at any time without prior notification.