# KINETIC™ SIGNALS

CENTRALIZED TRAFFIC SIGNAL SYSTEM



# **OVERVIEW**

Kinetic™ Signals is an evolution and advancement of Q-Free's celebrated MAXVIEW atms advanced traffic management system that monitors and controls traffic signal and ITS operations in real time.

The modern interface turns rookies into power users in no time and allows experienced users to quickly leverage the power of more advanced features.

A comprehensive intersection editor provides a holistic view of operations by mapping things such as lane maneuvers and vehicle or multimodal detectors in addition to signal heads and controllers. The same map can easily be replicated for alternate applications like adaptive signal control or connected vehicles, boosting efficiency and saving time.

Underscoring Q-Free's commitment to open, collaborative systems, Kinetic Signals strictly adheres to NTCIP protocols. By empowering users to add any NTCIP-compliant controller, the system reduces the need to manage legacy and new central systems during integration. In addition, Q-Free's data sharing API comes standard.

As part of Q-Free's Kinetic Mobility platform (see more on back), Kinetic Signals is built on a modern tech stack developed and used by tech giants providing a scalable solution for optimal performance today and into the future.

## **BENEFITS**

- · Advance mobility today and pave the way to the future
- Manage your entire traffic network from a real-time map
- Track device status and graphically follow the network path from the devices back to servers
- Visualize real-time graphical data as well as usage charts with the ability to perform trend analysis
- Retain and display a history of system events that can be used to monitor operations and/or troubleshoot
- · Easily expand and maintain devices with in-app licensing
- Integrate with third parties via dedicated API engine using GraphQL



WEB-BASED, THIN CLIENT PLATFORM



REAL-TIME DATA AND USAGE REPORTING



# **ADVANCED FEATURES**

#### ATMS FUNCTIONALITY

- · All devices in one tree with view filters
- · Single Sign On and federated authentication Keycloak
- · Configurable maps; no external programs necessary
- Expanded status displays and event monitoring
- · Supports spanning across multiple browser windows
- · Selectable multi-menus view for easy editing
- · System-wide enhanced filtering options
- · Real-time split monitoring in coordination and free
- · Real-time analysis tools and events monitoring

#### **DESIGN**

- · Complete local geometry design
- · Customizable signal indications
- · Corridor design
- Multimodal support
- · ATSPM configurations supported

## INTERSECTION CONTROL

- · Scheduler based command/control
- · Timeline views day/month/year
- · Manual control
- · Actions sets
- · Applied commands status

### **DATABASE EDITOR & MANAGEMENT**

- · Live front panel editor with tracking
- · History of changes with ability to rollback
- · Comparison and cloning
- Draft database and approved databases
- · Storage for ancillary signal files

# KINETIC™ MOBILITY

Kinetic Mobility enables agencies to collaborate on common mobility goals across local, intercity, and regional applications. Breaking down traditional traffic management silos, the platform offers a single, user-configurable interface to easily monitor and operate all aspects of intelligent transportation systems including traffic signals, events, signs, video, and more.

- · Provides a single, off-the-shelf solution
- · Unifies signal and freeway management
- · Creates a truly open traffic ecosystem

# REPORTING

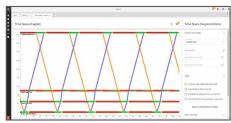
- · High-resolution data collection and reporting
- · Built-in ATSPM reporting capabilities
- · Interactive Time Space Diagrams with offset editing
- Customized reporting using device event details, communications logs, and external reports
- Full support of NTCIP compliant alarms
- Alarm delivery supported via toast notifications, audio alerts, email, and text



Web user interface



ATSPM reports



Time space diagram

