SOLUTION BRIEF

# IQ Fire Station Alerting System


## FASTER TURNOUT SAVES LIVES

### GET OUT THE DOOR FASTER WITH THE IQ FIRE STATION ALERTING SYSTEM

In fire emergencies, every second counts. Fire departments need to be alerted the moment an incident is reported for the absolute quickest response. Shortening the emergency response cycle requires a dispatch and alerting system that is not only reliable but also intuitive and easy to maintain.

RadioMobile's IQ Fire Station Alerting System sets the standard for speed, accuracy and accountability when you need it most. It can be customized to meet your department's needs, helping to ensure safety, streamline communication, and improve response times.

## IQ FIRE STATION ALERTING SYSTEM HELPS YOU MEET YOUR RESPONSE TIME GOALS



858-444-1330

# BENEFITS

*Technology is the key to meeting your response time goals while, at the same time, ensuring the health and safety of your team members. IQ Fire Station Alerting System (IQ FSAS) is a fully integrated, Windows-based, programmable system that provides simultaneous alerts to multiple stations instantaneously, shaving valuable seconds off critical response times. Below are just a few of the benefits IQ FSAS provides.*

## SPEED

IQ FSAS helps fire departments meet critical response requirements, helping you remain in compliance with local policies and NFPA. IQ FSAS sends simultaneous, instantaneous alerts to multiple stations as identified by the CAD system. Text-to-speech technology reads CAD text information and plays it over the station PA system or the radio channel, eliminating the dispatcher's time to voice alert the stations. The fire station's control unit and command terminal receive the alert and initiate a sequence of events that have been configured for each individual fire station.

## ACCURACY

IQ FSAS makes certain that everyone responding to a dispatch has the exact details of the incident regardless of their location. The details of the dispatch are displayed on supervisor's terminal as well as remote displays and printed in less than one second on a "rip and run" printer so they can take it with them, eliminating guessing in case MDC is not available.

## ACCOUNTABILITY

IQ FSAS seamlessly integrates with RadioMobile's in-vehicle mobile data computers (MDCs), so supervisors and responders know the exact location and status of emergency apparatus and personnel at all times. IQ FSAS ensures that everyone is visible and accounted for throughout the entire incident cycle.

## FLEXIBILITY

IQ FSAS is an end-user programmable system with customizable alerting. Lights and tones or voice messages can identify each apparatus required for the call, whether it is an engine, truck, battalion chief, specialty apparatus or medics. Alert lights and tones also correspond to particular crew rooms, so responders are only alerted to calls if they are needed for the specified apparatus required by the incident dispatch message. Tones, voice messages, and colored lighting are used to identify only the exact emergency personnel who need to respond.

## INTEROPERABILITY

IQ FSAS interfaces with multiple CAD systems, CAD vendors and dispatch centers allowing you to alert other agency stations and vice versa. IQ FSAS optimizes connectivity over multiple networks and types including IP, LTE, LMR and satellite.




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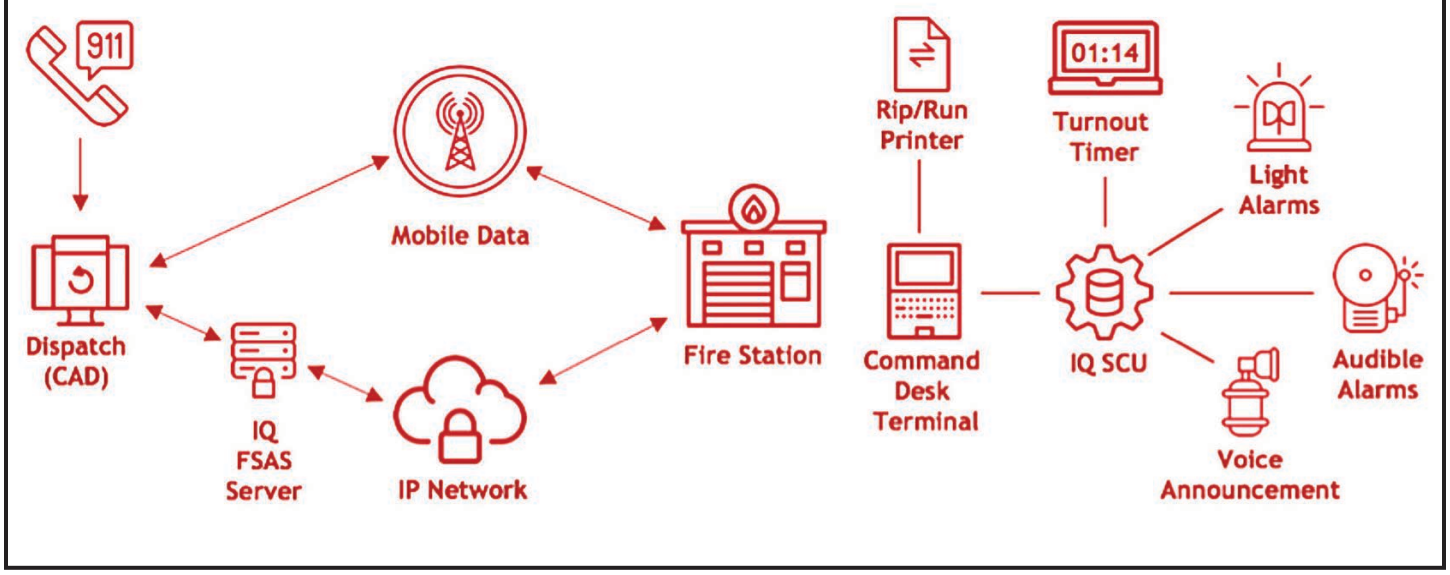
# SYSTEM DESIGN & COMPONENTS

*IQ FSAS is designed to meet your needs now and well into the future. It features standard peripherals as well as general purpose inputs and outputs (I/O) for system expansion into additional auxiliary station functions. The modular design makes it possible to add apparatus and fire stations as well as future technologies without service disruption and without having to replace the entire system or its components.*

The IQ FSAS high-level system diagram below demonstrates a basic system configuration consisting of the dispatch center (911/CAD), the communication networks, one or more fire stations, and the IQ Station Control Unit (SCU) and the corresponding peripherals.

## IQ FSAS Basic System Configuration




The CAD can communicate with the fire stations over traditional RF networks or over wired or wireless IP networks. The IQ FSAS Server provides an IP interface to the CAD and relays dispatch messages and status updates between the CAD and the fire station, specifically the Command Desk Terminal and the IQ Station Control Unit. These, in turn, control the peripherals including lights, speakers, turnout timers, bay doors and other equipment.



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# CORE COMPONENTS

## IQ STATION CONTROL UNIT

The IQ Station Control Unit (SCU) is the core of the IQ FSAS. The SCU utilizes IP-based or LMR-based digital communications, I/O for external control, PA for driving speakers, and a Command Desk Terminal for user interface. An integrated UPS supplies backup power for up to 24 hours of operation. It is expandable and customizable to meet customer needs. Features include:

- Alert message decoding from public or private wireless systems Relay controlled outputs (general purpose use)
- Opto-isolated inputs (alert switches, indicators, doorbell, etc.)
- External audio inputs (telephone interface, mic input, LMR radio inputs, PA inputs)
- Speaker zones (independently selected audio zones)
- Reports status (AC failure, battery low, etc.)
- Customizable codes compatible with agency's current alert system
- Configurable controller and Windows-based terminal provide user-defined functions
- 150-watt audio power amplifier feeds 4,8 ohm or 70v speaker with individual volume control
- Display and keyboard manage dispatch and messaging
- Backup battery power capability
- Ability to drive remote display terminals via Ethernet
- 4" thermal printer with one-second print speed
- Multiple configuration settings can be stored by authorized personnel (including default setting)
- Three wireless radios for voice, tone alert and data messaging use

## COMMAND DESK TERMINAL

Typically located in the supervisor's office or command location, this Windows-based computer runs the application to execute user-defined sequences for each incident type or message. These sequences contain step-by-step commands to the IQ Station Control Unit as well as prerecorded voice messages for equipment status such connection status, main power status and other conditions, like an incoming phone call or paging. Features include:

- Touch screen interface for ease-of-use
- Rip and Run Printer
- Battery backup supply
- Reports status and failures
- Can drive additional remote displays
- Browser-based mapping capabilities and GIS integration



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# OPTIONAL COMPONENTS

## RIP-N-RUN PRINTER

A printer with 4” paper that immediately prints out the dispatch information in less than a second. The printer guarantees that responders have the exact detail of the incident available to them as they are heading out the door.

## TURNOUT TIMER

A digital, count-up timer that is started when dispatch or incident is received. It can be set to stop at any point during a normal Incident sequence condition based on requirements.

## REMOTE DISPLAYS

Remote displays may be added to the IQ FSAS to display incoming dispatch messages in a variety of locations. Features include:

- 12-inch high-bright with dimming capability
- 12-volt DC or wall-mounted A/C adaptors
- Ethernet interface

## IQ FSAS SERVER

This optional, Windows-based server handles data between one or more CADs using IP communications that generate the proper formatted incident messages to the fire station’s Command Desk Terminal over wired or wireless IP networks are. The server also logs information such as location data and reports.

## BACKUP COMMAND SYSTEM

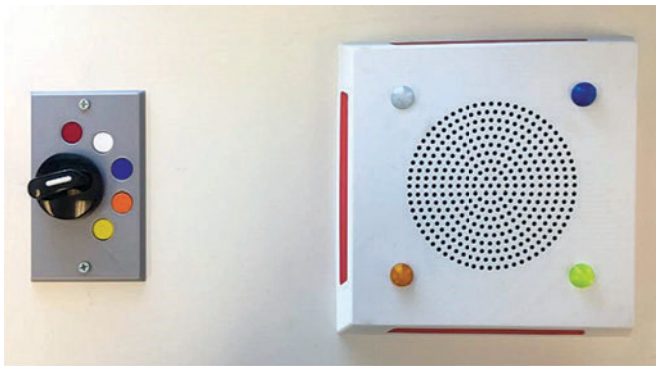
This optional system provides a failsafe for ensuring that dispatches are received in the event of a problem with the primary station control unit. Features include:

- Provides backup capability with limited functionality
- Wireless voice radio with two-tone alert capability
- In-house backup speaker to sound alert tones
- Self-contained backup battery

## CREW ALERT INDICATOR MODULE

A light fixture that contains a speaker, bright LED illumination and colored LEDs that indicate the required crew for response. A selector placed like a wall switch at the room door allows personnel to select the type of crew occupying that room, so they are only alerted when dispatched. Features include:

- Response unit identifiers (colored LEDs)
- Eye saver lighting bars
- Speaker
- Multi-position response unit selector switch





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## OPTIONAL COMPONENTS (cont)

## MOBILE DATA COMPUTERS

IQ FSAS seamlessly integrates with RadioMobile's ruggedized, in-vehicle mobile data computers, so supervisors and responders know the exact location and status of emergency apparatus and personnel at all times. Features include:

- Touch screen interface for ease-of-use
- Resistant to wear and tear during the toughest of conditions, making it ideal for in-vehicle use
- Powerful i5 processor with 16GB of RAM and 1 TB solid state drive for operational efficiency
- High bright multi-touch screen display for clarity and accuracy even in daylight
- 12 programmable, LED backlit function buttons to emulate
- Fanless with no moving parts
- Flush mountable in any vehicle hassle-free with a VESA 75 mounting pattern
- Ethernet, WiFi, USB and Bluetooth connectivity
- HDMI output for optional secondary screen
- Mapping capabilities and GIS integration




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# FEATURES

*The IQ FSAS is a fully automated, digital fire alerting system capable of interpreting and converting CAD dispatch data into Fire Station actions such as alert tones, lights, message displays, dispatch voice, etc. Below is a list of key features.*

## DISPATCH OPERATIONS

- Reduces dispatch-processing time by sending digital alert data over a high-speed network
- Notification of multiple stations simultaneously in less than a second
- Automated text-to-speech voice announcements, with the goal of reducing critical response times
- Direct interface with most Computer-Aided Dispatch systems (CAD) allows for two-way communications and status updates
- Manual dispatch backup options available allowing for alerting in the event CAD is unavailable
- Interfaces with multiple CAD systems, CAD vendors and dispatch centers allowing you to alert other agency stations and vice versa
- Receive a positive acknowledgment at dispatch that the alert was successful
- Automatically log and time stamp all system events, alarms and dispatch operator actions for post analysis

## COMMUNICATIONS SYSTEM

- Multiple data communication links mean that an alert will get through even if one link is down
- Automatic monitoring and notification of system health gives you the confidence that the system is ready to perform
- Multiple levels of system redundancy thanks to 100% independent backup alert option
- Continuously and automatically monitors and records system status and issues spoken warnings on equipment concerns
- All alarms and events are time and date-stamped, stored, and available for review and printing
- 24 hours uninterruptible battery power (UPS) in the event of power loss allowing alarm sequences to continue to be received




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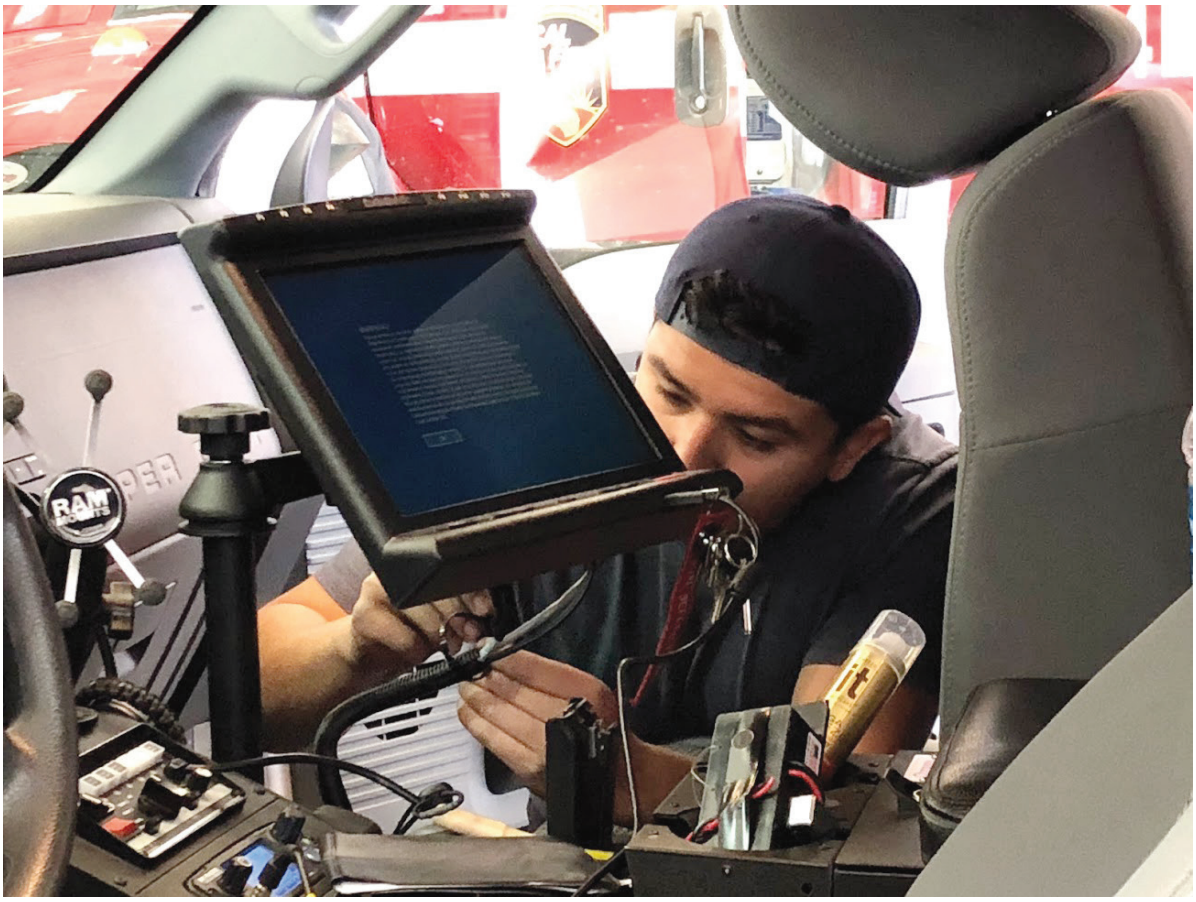
## FEATURES (cont)

### STATION EQUIPMENT

- Incident details are simultaneously displayed on the Command Desk Terminal, LCD monitors and spoken over station speaker system
- Alerts, triggers, actions, sequences, tones, timers can be easily configured locally
- Unlimited user-defined response sequences
- User-defined tones and voices
- Custom alert tones by type of alert
- Easily scheduled pre-recorded voice announcements
- Controls station lighting during an alert sequence
- Ability to strobe in high noise environments or to attract attention
- Provides ramped night vision supported lighting for nighttime dispatch.
- Day/night operation of an outside light and speaker may be controlled independently from other station equipment
- Up to six audio inputs
- High-power audio amplifier drives station overhead speakers during an alert.
- Integration with station appliances, bay doors and other devices during an alert sequence.
- Optional rip-n-run printer prints complete incident details in less than one second
- Optional turnout timer provides elapsed time to measure and improve time-out-of-station

### STATION ZONING

- Heart-saver alert tone precedes all alerts
- Zone control alerts (lighting and audio) only the crew(s) and/or spaces needed for the call
- Provides colored indicators to confirm dispatched equipment types
- Crew room controller configures system to which crew is occupying that shift



# PROFESSIONAL SERVICES

*RadioMobile provides a complete array of professional services ensuring that IQ FSAS meets your requirements from start to finish. All services are provided by qualified technicians in accordance with established industry standards and codes with the goal of minimizing disruption to current operations and safeguarding personnel. Services include:*

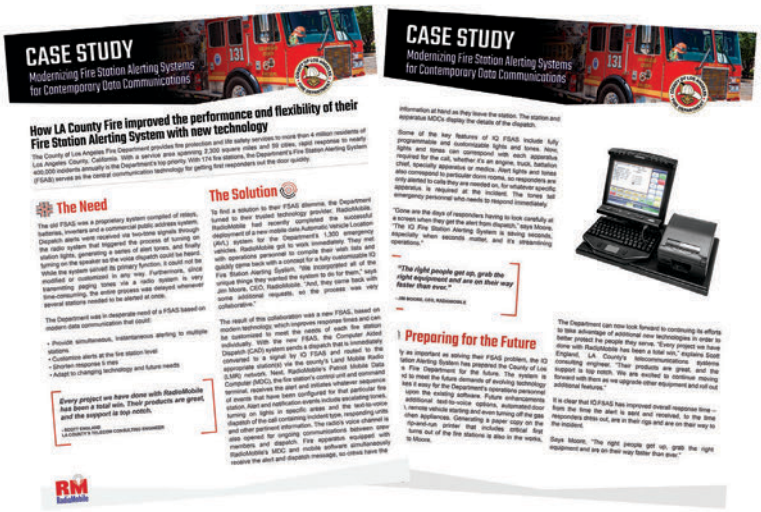
- Project Management
- System Engineering
- Consulting
- Software Development
- System integration
- Acceptance Test Procedures (ATP)
- Complete Operational Manual
- On-site training
- CAD integration
- Customization
- Proof-of-Concept
- Simulation and test capability of alerts/actions
- 24/7/365 customer support

> "Every project we have done with RadioMobile has been a total win. Their products are great, and the support is top notch."
>
> - SCOTT ENGLAND, LA COUNTY'S TELECOM CONSULTING ENGINEER

# WHO WE SERVE

*RadioMobile partners with leading fire departments and other agencies to make a difference throughout their operations with customized solutions that address their unique challenges.*

To learn more about IQ FSAS click below to read the
Los Angeles County Fire FSAS Case Study.
https://www.radiomobile.com/la-county-fire-case-study



# COMPLIANCE AND WARRANTIES

## NFPA 1221 Compliance for Emergency Services Communication Systems:

IQ FSAS technology supports NFPA 1221 (2019) compliance in the following areas:

- Multiple means of dispatching
- Multiple CAD integration
- Alerts within seconds
- Unique alarms for specific crews
- Continuous response time improvement
- Integration beyond the fire station and into the mobile units supporting the entire incident lifecyle
- Support for ruggedized in-vehicles mobile data computers
- Support for wired and wireless dispatching of different types
- Independent backup power sources
- Integrity monitoring and 2-way status reporting
- Network security and user authentication and role-based access
- System backup and redundancy

## NFPA 1710 Compliance

IQ FSAS technology supports NFPA 1710 (2020) compliance in the following areas:

- Logging and reporting for evaluation and continuous improvement
- Improvements in quality management
- Reliable and redundant communications system
- Support for training mode

## WARRANTY

IQ FSAS includes a 5-year equipment warranty.