

Trunked IP25™ Infrastructure Systems



- ▶ **Reliable**
- ▶ **Secure**
- ▶ **Feature Rich**
- ▶ **Standards Based**

IP25
EFJohnson



First responders need a secure, reliable, and flexible Project 25 trunked communication system. EFJohnson's Trunked IP25™ Infrastructure System is a Project 25 compliant trunked system that is designed specifically for public safety and homeland security, and utilizes Voice over Internet Protocol (VoIP) for system integration.

Trunked IP25 provides a modern trunked P25 infrastructure for all of your communications needs. This modern system meets the National Telecommunications and Information Administration (NTIA) mandates for narrow-band operation in VHF and UHF frequencies as well as Department of Defense mandates for Project 25 compliance.

Trunked IP25 is a switchless end-to-end digital environment. This system solution does not require a traditional network switch or Central Electronics Cabinet to link your consoles or repeaters, rather it uses standard off the shelf IP networking equipment. Your advantages are quicker deployments, fewer network elements to own and maintain, and increased scalability.

Trunked IP25 Infrastructure Systems

Key Features and Benefits of Trunked IP25

Interoperability with Legacy Systems

- Trunked IP25 repeaters operate in P25 Digital mode, providing clean digital communications.
- EFJohnson's P25 subscriber radios operate in P25 Trunked, P25 Conventional, and SMARTNET®/SmartZone® - all in the same radio! Whether you use EFJohnson's Project 25 subscriber radios or P25 equipment from another supplier, Trunked IP25 provides a secure and reliable P25 system solution.
- Add or reconfigure radios and other network elements as your needs evolve, over the life of the system.

Interoperability Across Multiple Agencies

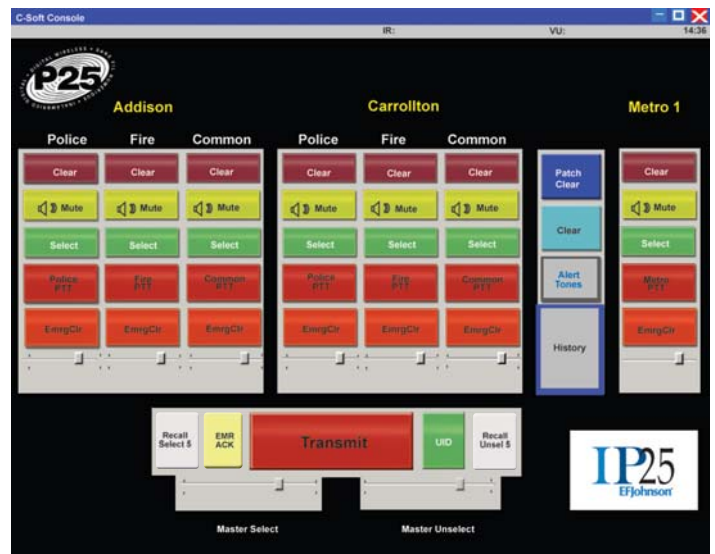
- Project 25 Common Air Interface (CAI) capability enables users to communicate with other P25 equipment on your network.
- Analog Conventional, P25 Conventional, and P25 trunked channel access and control provide the critical communications paths to your users.
- Radio users can talk to each other in the field. Dispatch centers and command/control facilities can easily conference, which enables critical communication paths when time is vital.
- Total IP-based console eliminates the need for cumbersome electronics cabinets, reduces costs, minimizes footprint, and streamlines maintenance.

VoIP Technology

All IP25 systems utilize an inherent Voice over Internet Protocol (VoIP) architecture. Each system element from the repeaters to the network management system and the console utilizes IP for sending voice and data across a heterogeneous packet network. The advantage of IP is installation or expansion of your network occurs with unprecedented speed and with greater reliability due to the distributed IP architecture. No more cumbersome punch blocks or audio switches with this highly scalable architecture.

Redundancy and Security

- Multiple voice channels ensure a high level of redundancy and availability for critical calls.
- IP25 Integrated Network Controller is integrated into the repeater, which simplifies system management.
- Trunked IP25 brings encryption and interoperability into the same P25 communications system. FIPS certified, end-to-end encryptions supported include AES and DES-OFB. You can make sure that only the right people are involved in conversations on your system.
- Tighten security by using the IP25 Key Management Facility (KMF) to perform Over the Air Rekeying (OTAR) of all your radios in the field. KMF provides quick, secure, and complete management of subscriber radios.



IP25 Digital Dispatch Console

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Elements of the Trunked IP25 System Include:

Repeaters

EFJohnson's P25 repeaters provide the solution for Project 25 digital operation in the VHF, UHF, and 800 MHz Band. For added convenience and network management, these repeaters connect directly to the Ethernet network using industry-standard routers. Software defined configurations allow for PC programmability of operating frequency, output power and other functions-providing quick installation capability.

IP25 Digital Dispatch Console

Trunked IP25's Digital Dispatch Console enables all of your first responder groups to be connected. This console operates in Trunked and Conventional modes, which ensures inter-operability with legacy systems. The Digital Dispatch Console's OTAR capability provides encryption continuity with the users in the field. You can manage your entire system from one place-anywhere you have a connected computer. Trunked IP25's Digital Dispatch Console operates on Windows®-based PCs.

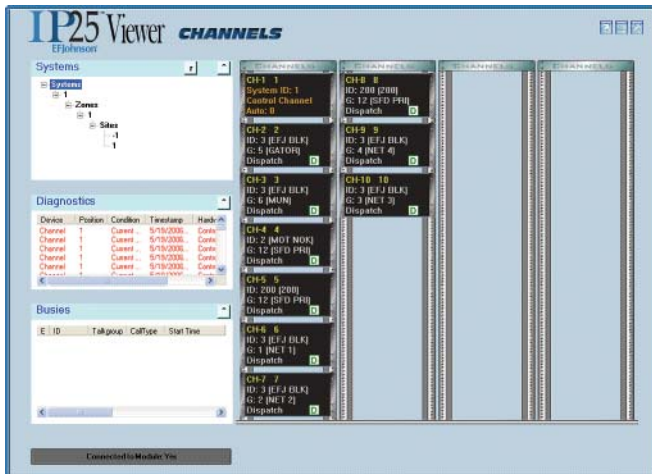
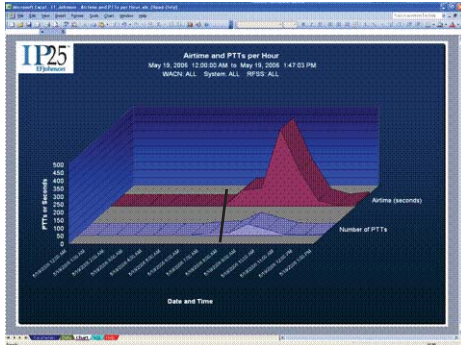
IP25 Network Management System (NMS)

Accessible, intuitive, and powerful. The IP25 Network Management System (NMS) can be accessed by authorized users from any PC with a web browser and network connectivity. User friendly menus and drop down selection boxes make operating the NMS as simple as navigating pages on the Internet. It is a feature rich platform that allows remote configuration and management of the system as well as provides advanced capabilities such as multi-agency partitioning, dynamic regroup, and remote radio disable.

IP25 Viewer

The IP25 Viewer is a suite of software tools that assist the administrator in managing overall performance of the trunking system. Real time scrolling detailed lists or graphical representations of the repeater site can be used to monitor the health of the IP25 Trunking System. A suite of pre-configured reports can be used to observe trends and track system usage.

Trunked IP25 Infrastructure Systems



Project 25

Telecommunications Industry Association's (TIA) standard for digital 2-way radio technology. Project 25 was originally created by the Association of Public-Safety Communications Officials, International (APCO) in cooperation with the National Association of State Telecommunications Directors (NASTD) and the U.S. government to ensure interoperability between Federal, state, and local public safety agencies. EFJohnson was one of the first developers of wireless communications products to be fully compliant with Project 25 interoperability standards.

About EFJohnson

EFJohnson is a leading provider of two way radios and trunked/conventional communication systems for law enforcement, fire fighters, EMS, and the military. Founded in 1923, the company has a lengthy history of leadership in numerous communication industry standards initiatives and organizations and was one of the first developers of wireless communications products to be fully compliant with Project 25 interoperability standards. EFJohnson offers a comprehensive portfolio of digital and analog radio communications solutions which assist in effectively and affordably managing the transition to digital P25 compliant systems. Our customers tell us that we provide rugged, reliable, and interoperable solutions along with a high level of customer service and support.