New P25 Products and Services APCO 2023

Project 25 Technology Interest Group (PTIG)

www.project25.org

APX NEXT XN & XVN500

All-band P25 Smart Radio & Radio Speaker Mic
VHF, UHF, 7/800, GPS, WiFi, Bluetooth, LTE

What is New

- Offering the new platform of public safety applications introduced with APX NEXT in a more ruggedized design with exaggerated controls for gloved use
- The radio and RSM are built to the latest fire industry standards for operation in the most extreme environments

P25 Interoperability Solution

- FDMA and TDMA P25 Air Interface interoperability as well as LTE

Benefits to Public Safety

- Firefighters can keep eyes up and focus forward with intuitive ergonomic design and voice control, even in extreme conditions
- Always stay connected by automatically switching between LTE and LMR based on coverage. All P25 features stay intact.
- Continuously transmit location data over LTE
- Keep devices in the field longer by implementing updates over LTE

VP8000 Multi-Band Portable

The KENWOOD Viking 8000 series Multi-Band, Multi-Protocol portable is specifically designed for today's public safety agencies with advanced features and ergonomics to meet the first responder's mission critical operational needs.

- Next generation Viking
- Multi-Band operation (VHF, UHF, 7/800 MHz)
- Multi-Protocol
- Large full-color top LCD
  - Multi-line text – front & top displays
  - Top flip display changes text orientation
  - Configurable display lines / color schemes
- Mixed protocol zones
- Wi-Fi
- GPS
- Bluetooth
- Public safety ergonomics

Booth #1029

L3Harris XL EXTREME™ 400P Portable Radio

VHF, UHF, 7/800, GPS, Wi-Fi, LTE, Bluetooth

ENHANCED CONNECTIVITY BUILT IN

GPS

Wi-Fi

Bluetooth™

LTE

WHAT IS NEW

- Built to the toughest industry standards for operation in extreme environments
  - Heat resistant seals and display to withstand temperatures up to 500°
  - Ruggedized against damage from 3-meter drops, salt water and humidity corrosion
- Provides advanced ergonomics for fireground operation
  - Larger emergency button and optional in-building location capability
  - Top display with unique visual zone coding
  - Color tagging and audio playback for the last 5 calls

P25 INTEROPERABILITY SOLUTION

- Multiband P25 operation in VHF, UHF, 7/800
- CAP certified, field-proven P25 interoperability
- Converged P25, Wi-Fi and LTE technologies

BENEFITS TO PUBLIC SAFETY

- Keep everyone connected in extreme fireground conditions
- Enhance PTT coverage & simple device management over LTE networks like AT&T® and Verizon®
- Loud and clear audio with industry-leading noise cancellation

L3HARRIS™
FAST. FORWARD.

www.L3Harris.com

Introducing the new BKR 9000
P25 All-band Portable Radio and InteropONE

OUR MULTI-BAND RADIO:

KEY FEATURES:

- **5-YEAR STANDARD WARRANTY**
- Single, dual, multi-band operation (VHF, UHF, 700/800 MHz)
- P25 conventional and trunking (phase 1 and 2)
- IP 68, MIL SPEC 810 C, D, E, F, G
- FIPS 140-2 Level 3 validated AES encryption (with OTAR) capable
- USB & Field programmable (up to 5,000 channels)
- Four tiers available

InteropONE DELIVERS:

Ease of use – quickly create talkgroups on demand from your smartphone, within minutes

Local Control into the hands of incident commanders and emergency management personnel

Secure communications using Azure Government cloud, NIST FIPS-140 compliant ciphering suites, multi-factor authentication

Tait TP9800 Multiband
P25 Portable

What is New

- Connect across VHF, UHF and 7-800MHz bands

P25 Interoperability solution

- Conventional Analog and P25 Digital
- P25 Digital Trunking Phase 1 & 2

Benefits to Public Safety

- Multiagency communications and system migration
- Seamless operation to scan and roam across bands
- Easy ordering, flexible deployment - Enable one, two or three bands at the factory, or in the field via WiFi OTAP
- 18 hour shift life in P25 Phase 2 mode
- The lightest P25 multiband portable in the market

TP9468 Intrinsically Safe P25 Portable

What is New

- Class I Division 1 - All Gas Groups A, B, C, D
- Class II Division 1 - Dust Groups F, F, G
- Class III Division 1 - Fibres and Flyings

P25 Interoperability solution

- Conventional Analog and P25 Digital
- P25 Digital Trunking Phase 1 & 2

Benefits to Public Safety

- Tait GeoFencing Automated Workflow
- Choice of colors for easy identification
- Tait Tough IP68, IP65 and MIL-STD-810 G

New Multi-Mode TETRA-P25 Radios

What is New

- Dual-Mode TETRA-P25 selectable through the user menu.

- FCC certified 764-869 MHz (except NPSPAC 806-809/851-854 MHz).

P25 Interoperability solution

- P25 CAP certified for nationwide interoperability channels.

- Fully compliant with requirements set forth in Feb 12, 2018 FCC Report & Order governing 700 MHz band.

Benefits to Public Safety

- Cellphone-like speech quality, background noise cancellation, GPS data, Image App.

HTT-500-2

MDT-500-2

PowerTrunk

http://www.powertrunk.com

F7010/F7020/F7040 Portable
F7510/F7520/F7540 Mobile

What is New

- Voice log archives with GPS metadata and mapped RSSI analysis with Radio Discovery Tool (RDT)
- Hardware based advanced system key (ASK)
- Enhanced talkgroup scanning (up to 32 talkgroups with user selectable priority modes)
- Receive only talkgroups prevent unauthorized transmissions

P25 Interoperability solution

- VHF, UHF and 700/800 MHz models
- Conventional Analog FM/P25/Mixed-Mode and P25 Phase 1 (FDMA) and Phase 2 (TDMA) trunking
- AES/DES Encryption with Over-the-Air Rekeying

Benefits to Public Safety

- Small lightweight and concealable for surveillance and tactical operations and smaller vehicle installs
- Recorded voice log archives with GPS metadata show when and where voice calls were made and can help identify interference issues
- Diagnostics with mapped RSSI analysis values can show lack of coverage where coverage was expected

http://www.icomamerica.com/en/landmobile/

L3Harris Two47 P25 Base Station

7/800 MHz P25 Trunking Base Station

WHAT IS NEW

- L3Harris is pleased to introduce a new family of P25 site products that is available in single-site, multi-site, and simulcast configurations.

  Open – Endlessly upgradeable to evolve with your operation

  Adaptable – Small package with expansive range

  Unstoppable – Rugged, resilient and protected around the clock

P25 INTEROPERABILITY SOLUTION

- P25 Trunking solution in 7/800 MHz available to order now
- CAP Certification in-process

BENEFITS TO PUBLIC SAFETY

- <u>Small footprint</u>: saves space, money, and is eco-friendly. Supports up to 10 channels in a single rack including the RF combining equipment

- <u>No single point of failure</u>: industry leading resiliency including:
  - Distributed control points offer four levels of simulcast control point resiliency
  - All channels capable of being the control channel; never reverts to conventional

L3HARRIS™

FAST. FORWARD.

MT-5 Modular, Low-Power Analog & P25 Repeater Base Station

APCO BOOTH#: 1701

www.zetron.com

What is New

- **MT-5 Subrack** with improved maintenance, lower power draw, and new software-defined controls
- **MT-5 Utility Module** simplifies on-site maintenance, includes meter jacks, speaker, and togglable LED active channel display
- **GPS Location Services** enable field resource tracking and other DFSI data capabilities
- Remote site monitoring and programming with **MT-5 Site Controller** (coming soon)

P25 Interoperability Solution

- Zetron MAX Dispatch and ACOM solutions are fully P25 compliant via CSSI and DFSI
- P25 Standard interfaces to third-party applications and technology for turnkey solutions
- Modular design allows for hot-swappable components and incremental upgrade paths

Benefits to Public Safety

- Backwards-compatible with MT-4E modules, allowing for modular, affordable upgrade path for advanced capabilities
- Built to thrive in the harshest environments on the planet

KENWOOD | KAIROS

P25/DMR Multi-Protocol Systems

- Multi-Protocol (Analog, DMR & P25)
- Multi-mode (Analog/Digital) operation
- Fully IP-based distributed network architecture
- Single site, Multi-site conventional & Simulcast solutions
- Compact, Rugged, Small footprint
- Low power consumption
- Hot standby repeater offering
- Powerful remote control & monitoring
- Soft diversity receiver
- Seamless system upgrades (no need to change hardware)
- System redundancy

Booth #1029

RadioHub™
Tactical P25 Digital Voter / Call Router

What is New

- IP operation over low bandwidth topology neutral network configurations

- Frequency neutral voting and crossbanding

- Cloud or On-premise operation

P25 Interoperability solution

- P25 DFSI Interface

- Support for P25 Voice and Data

Benefits to Public Safety

- Rapid easy deployment and configuration

- Inter-agency communication and interoperability

https://www.adcomllc.com/
Sales: 480-626-2318
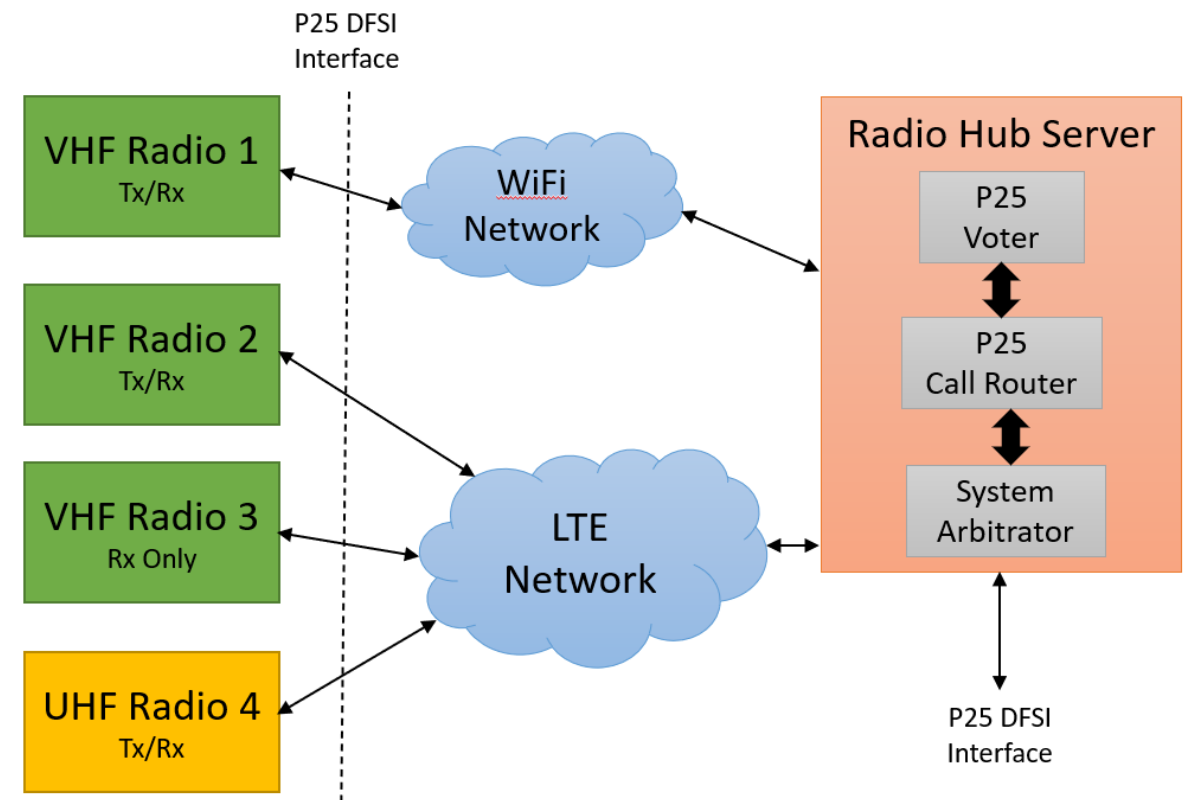
New Skymira P25 IP Relay

What is New

- Portable P25 Network — take your coverage with you
- Highly Secure — FIPS 140-2 level 1 validated

P25 Interoperability solution

- Manufacturer agnostic — supports all manufacturers, mix and match prefered P25 radios
- Network Agnostic — satellite, LTE, FirstNet, fixed site ISPs, and/or fiber
- Transmits all P25 Audio & Data — audio, subscriber ID, GPS location & emergency call

Benefits to Public Safety

- Extend coverage so users are never out of range
- Get real-time GPS location and emergency alerts from anywhere
- Keep comms online during outages and disasters

www.Skymira.com/skymira-p25-ip-relay

P25 IP RELAY

Works with all conventional P25 radios

- Portable P25 Network
- LTE/FirstNet/Satellite
- Interoperability
- FIPS 140-2, AES-256

PUBLIC SAFETY   WILDLAND FIRE   ENERGY

P25 LMR – LTE InterWorking Function (IWF)

What is New

- Carrier-grade 3GPP to LMR standards-based interoperability platform

P25 Interoperability Solution

- IWF support of DFSI and both Phases of the CSSI and ISSI standards

Benefits to Public Safety

- Seamless communications using standards-based multi-vendor subscribers on 4G LTE/5G and P25 eco-systems

www.etherstack.com

New P25 Tactical Mixed Mode Repeater

What is New

- Tactical Mixed Mode repeater
- Rugged Extremely Compact Housing
- All P25 Network Interfaces available

P25 Interoperability solution

- Supports IP/H.F. & Satellite Backhauls
- Interfaces with FSI (BAHA)+CSSI+ISSI (Phase One &Two)

Benefits to Public Safety

- Deployable P25 Repeater for Emergency Communications

7.8"

etherstack
wireless innovation

www.etherstack.com

What is new

- Enhanced GUI for all tactical markets

- **Wide Band Transceiver** – 29.7 – 960 MHz P25 Compliant – Compact

- **Search & Rescue (SAR)**
  - 121.5 MHz AM
  - 243.0 MHz AM
  - 156.8 MHz FM (Channel 16)
  - 156.525 MHz FSK (DSC, Channel 70)

- Seamless relay, simulcast, and relay/simulcast

P25 Interoperability solution

- All P25 bands Common Air Interface (CAI), Phase I, II trunking

- 29.7 – 960 MHz Common Air Interface (CAI) AES encryption

- P25 VHF – 6W Min UHF – 5W Min 700/800 MHz – 3W Min

Benefits to Public Safety

- Lowest cost of ownership through easily upgradable modular architecture

- Best in class color display and interface

- Most interoperable radio on the market

BYNE ControlONE is the critical mission communication solution for operations centers

What is New

- **BYNE ControlONE** is a critical mission communication platform for operation centers, that integrates radio, telephony, PTT over Cellular and text messaging systems, in addition to allowing the connection of geolocation and video systems.
- **BYNE ControlONE** provides P.25 connectivity.

P25 Interoperability solution

- Connect to P25 systems via DFSI and/or CSSI/ISSI.
- Provides interoperability between all supported LMR protocols, such as DMR, Tetra, NXDN, Satellite PTT and analog gateways.
- Provides interoperability between LMR, Satellite PTT, PTT over Cellular, and Telephony systems.

Benefits to Public Safety

- Seamless integration of communication platforms with CAD systems.
- Simplified user experience for dispatch operators.
- Interoperability with multiple agency communication systems, with integrated audit and recording.

www.byne.com.br

Avtec Scout Dispatch Console

What is New

P25 Conventional and Trunking Wireless Interface with APX™ Consolette & APX™ Mobile Radios - Group Call, PTT ID, Emergency Call, Zone and Channel Control, Paging & other signaling features

1. Tested and updated with the Department of Defense's Security Technical Implementation Guides (STIG)
2. Microsoft OS and third party application patches applied each Scout release
3. Nessus scans ran to identify and mitigate vulnerabilities each Scout release
4. Third Party Cyber Security audit once per year to verify security posture

P25 Interoperability Solution

1. Avtec Scout dispatch console connects to P25 via CSSI, DFSI, APX Consolette, or APX Mobile
2. Interoperability with Broadband, DMR, LTE, NENA, Telephony
3. P25 DFSI an CSSI endpoints benefit from the standard Scout console features, in addition to the P25-specific features that Scout supports

Benefits to Public Safety

1. Connect P25 systems to other critical communications technologies for maximum interoperability
2. Dynamic and scalable platform that easily accommodates new and legacy technologies
3. Ideal solution for supporting communication technology migration plans and building a future proof solution
4. Designed, built, and supported in the U.S.

https://www.avtecinc.com

InterTalk Enlite™ Dispatch Console System

What is New

- **Enlite™** is a first-to-market dispatch solution in North America.

- Offers a public-safety-grade dispatch console with industry-standard **on-premises** deployment (Enterprise) or empowered with the **cloud** (Hosted).

- **Enlite™** provides P25 connectivity in the field via mobile-connected devices.

P25 Interoperability solution

- Connect **Enlite™** console to P25 via DFSI or CSSI/ISSI.

- Convergence of analog radio, P25, LTE, call-taking capabilities, and more.

- Allows a user to extend their P25 network over Wifi and LTE.

Benefits To Public Safety

- Empower your P25 system to create seamless communications across multiple devices.

- Utilize P25 **Talkpath Pooling** to reduce the number of required audio talkpath licenses on a system.

- P25 **Resource Sharing** allows dispatchers to share P25 channels connected over DFSI or CSSI between independent InterTalk console systems for interoperability and continuity of operations.

Learn more at InterTalk Booth # 1437

www.intertalksystems.com

Telex Radio Dispatch

What is New

IP-3000 series desktop consoles supporting optional P25 CSSI and DFSI connections with AES-256 encryption.

IP-3008-PS

P25 Interoperability Solution

When coupled with IP-224's and donor control stations, P25 and non-P25 channels can be cross-patched between agencies.

IP-3018-PS

Benefits to Public Safety

Best ROI for P25 solutions and use of public funds.

Remote configuration and management

CommandCentral AXS Console
Dispatching for the Modern World

What is New

- Works the Way You Do with the Next Generation Dispatch Experience

- Retain Your Focus with Cross Platform Integration Capabilities

- Connect to Multiple Communication Platforms Simultaneously

- Experience Pain Free Enhancements

P25 Interoperability solution

- Seamless Multisystem (P25, MOTOTRBO, Analog, Firstnet) Access

Benefits to Public Safety

- Improves Ease of Learning

- Eliminates New User Frustration and Burnout

- Improves Speed and Efficiency

Critical Connect

P25 Interoperability Made Easy

What is New

- **Interoperability between P25 land mobile radio systems**
  - ASTRO 25 to ASTRO 25, ASTRO 25 to other P25 systems, ASTRO 25 to broadband PTT
- **Seamless communication between users on different networks**
  - Voice, Location and Messaging

P25 Interoperability Solution

- **Critical Connect ISSI First to Achieve P25 CAP Compliance**

Benefits to Public Safety

- **Easier to Share Information Between Agencies**
- **Improved Collaboration**
- **Greater Situational Awareness**
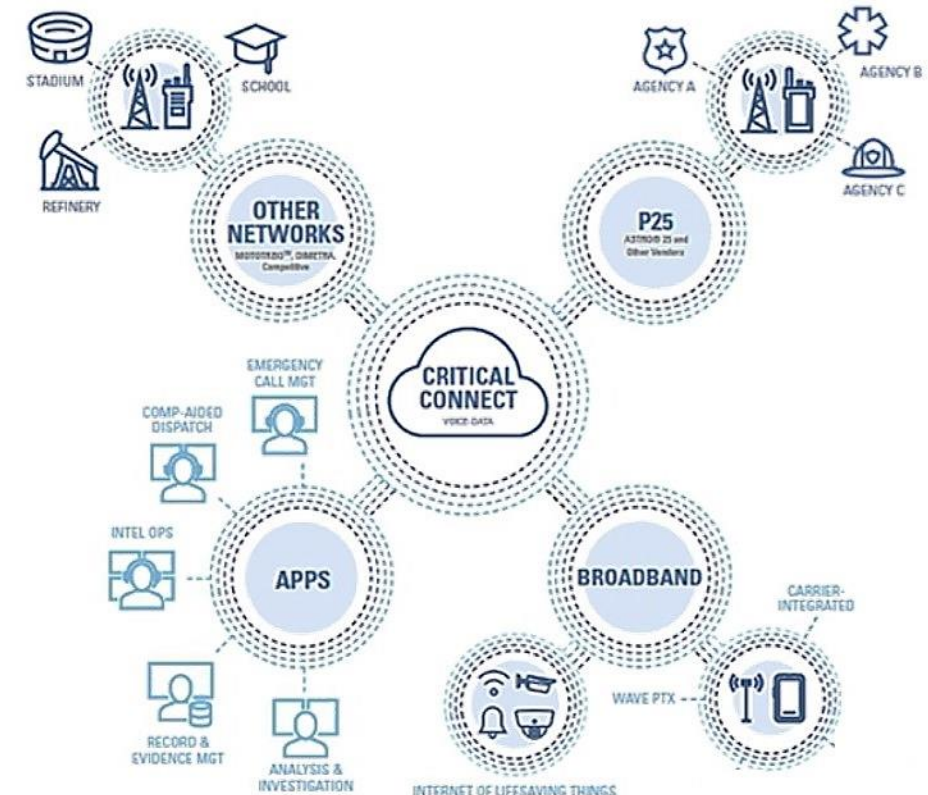
P25 LMR LTE Interworking and Push to Talk over Broadband Interoperability Solutions

What is New

- Demonstrating IntelliLink™ Interworking Solution from Catalyst
- Standards Based Communications between P25 LMR and MCPTT on LTE Networks (FirstNet™, Southern Linc, etc.)
- **NEW: Broadband Interoperability between disparate Push to Talk over Cellular systems**
    - **MCPTT Compliant – 3GPP Client Interface**
    - **Non MCPTT Compliant – P25 CSSI**

P25 Interoperability Solution

- Provides Interworking Communications betweenP25 subscribers on LMR Radios and Smartphone users with MCPTT Application

Benefits to Public Safety

Standards based solution for Critical Communications
- Enables transition to MCPTT on LTE for current P25 Systems

www.catcomtec.com
Booth 1428
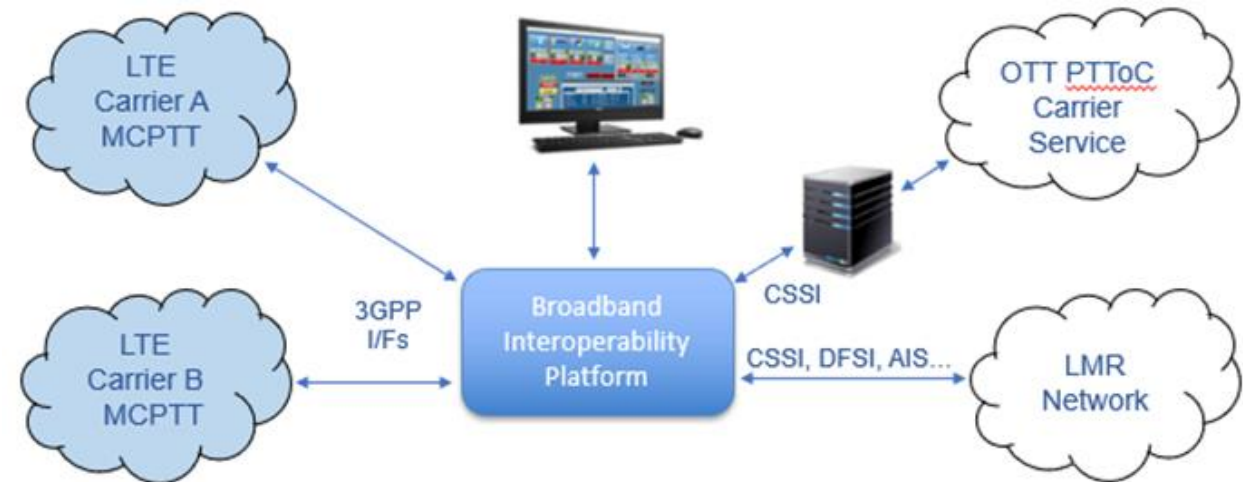
DFSI Gateway

What is New

General Features
- DFSI v1 and v2 compatibility
- Channel Change
- Repeat On/Off
- Monitor (Squelch Bypass)
- Voter receiver and transmitter selected/enabled/disabled status and control

Digital Features
- Full-Rate AMBE voice encode/decode
- Group Calling
- Individual Calling
- Emergency Calling and Alarming
- Radio Check, Stun, Revive, Remote Listen, Call Alert, Status Querying, Status Messaging
- NAC Control
- DES/AES Encryption
- RX/TX Level Settings
- RX EQ

Analog Features
- MDC-1200 Emergency alarm decode
- MDC-1200 ID encode/decode
- CTCSS/CDCSS control
- RX/TX Level Settings
- RX EQ

P25 Interoperability solution
- Patch traffic between different base stations at talk-group level.
- Patch P25 base station with numerous other technologies when paired with the Mindshare Radio Interface (MRI)

Benefits to Public Safety
- Migrates legacy analog infrastructure to P25
- Single gateway supports multi-vendor stations via DFSI standard
- Lower cost with more features than previous offering
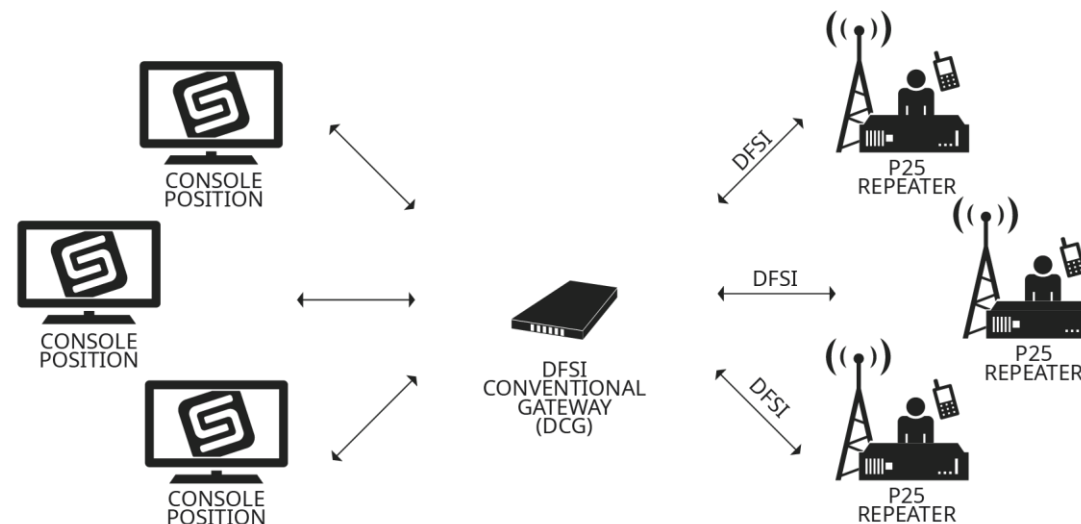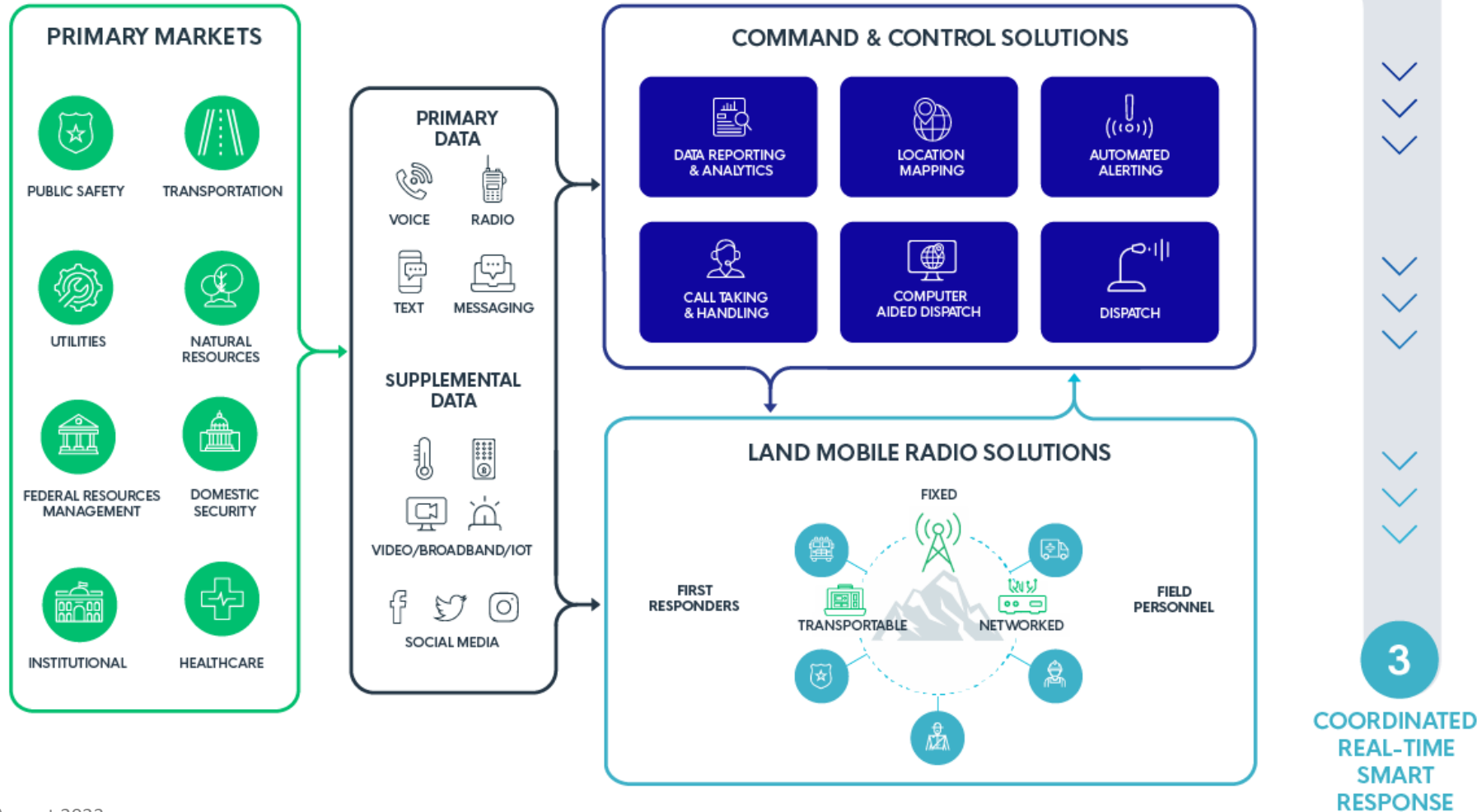
www.css-mindshare.com

Booth #1737

MISSION CRITICAL SOLUTIONS

From public safety emergencies to commercial needs for collaboration and managing corresponding actions, Zetron solutions empower integrated mission critical communications.

1 COMMUNICATION INITIATED >>> >>> >>> **2** DATA INTAKE/MANAGEMENT

PRIMARY MARKETS

- PUBLIC SAFETY
- TRANSPORTATION
- UTILITIES
- NATURAL RESOURCES
- FEDERAL RESOURCES MANAGEMENT
- DOMESTIC SECURITY
- INSTITUTIONAL
- HEALTHCARE

PRIMARY DATA

- VOICE
- RADIO
- TEXT
- MESSAGING

SUPPLEMENTAL DATA

- VIDEO/BROADBAND/IOT
- SOCIAL MEDIA

COMMAND & CONTROL SOLUTIONS

- DATA REPORTING & ANALYTICS
- LOCATION MAPPING
- AUTOMATED ALERTING
- CALL TAKING & HANDLING
- COMPUTER AIDED DISPATCH
- DISPATCH

LAND MOBILE RADIO SOLUTIONS

- FIXED
- FIRST RESPONDERS
- FIELD PERSONNEL
- TRANSPORTABLE
- NETWORKED

3 COORDINATED REAL-TIME SMART RESPONSE

ZETRON

APCO BOOTH#: 1701

www.zetron.com

P25 CELEBRATING 30 YEARS OF INTEROPERABILITY

Viking Armada Server
Distributed Programming Capability for Fleet Management

NEW: Armada Server for Viking P25 public safety radios

- Allows multiple radio managers to share a common, central database.

- Offline mode allows radio managers to make updates that are synchronized when returning on-line.
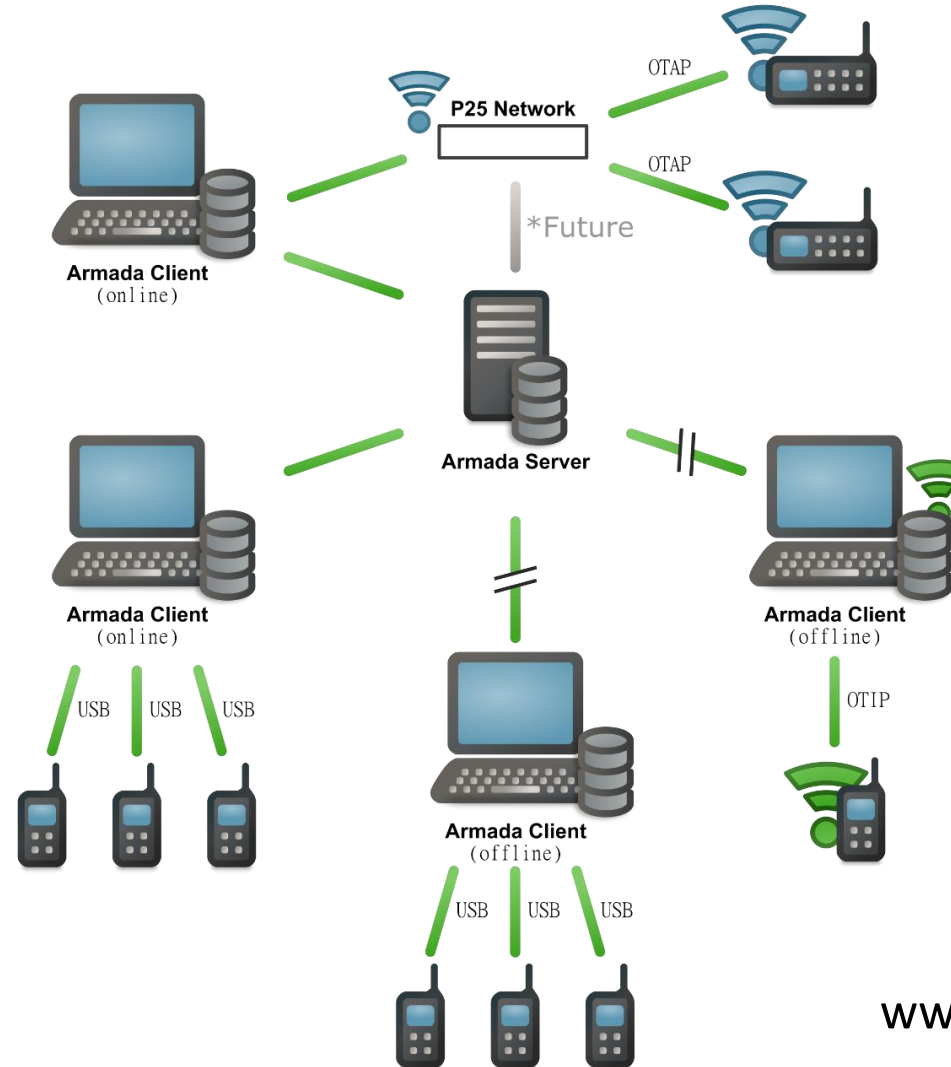
www.EFJohnson.com

NEW! 5G Ultra Wideband Antenna

What is New

- High-efficiency antenna
- Offering expansive coverage from 600 MHz to 7.2 GHz
- Supports 5G NR FR1, Wi-Fi 6e, CBRS, Band14, Bluetooth® and FirstNet

P25 Interoperability solution

- Rugged, compact, low-profile design
- For public safety, fleet, rail, military and IoT applications
- Meets MIL-STD-810, AREMA, IPX7, SAE J1455 environment standard

Benefits to Public Safety

- Available in black or white
- In stock & ready to ship
- Proudly designed & manufactured in the U.S.A.

[Click Here For More Information](#)

Booth # 1007

CX300 Communications Service Monitor

What is New

- Complete communications test solution

P25 Interoperability solution

- Ability to test P25 Phase 1 and Phase 2, including Linear Simulcast Modulation

- AES and DES Encryption*

- Vocoder*

- Keyloader*

Benefits to Public Safety

- Complete and portable RF testing of P25 subscribers and infrastructure

https://www.viavisolutions.com/en-us/products/cx300-comxpert

*COMING SOON

8800SX Radio Test Set

What is New

- Additional Auto-Test support for Harris and Motorola P25 radios
- Kenwood Viking and Tait P25 radios added to the Auto-Test family

P25 Interoperability solution

- Phase 2 support
- Infrastructure testing with Wideband RF Power Sensor

Benefits to Public Safety

- Ensure indoor and outdoor RF signal coverage with signal strength mapping solutions
- Portable RF testing of P25 subscribers and infrastructure

https://www.viavisolutions.com/en-us/products/8800sx-digital-radio-test-set
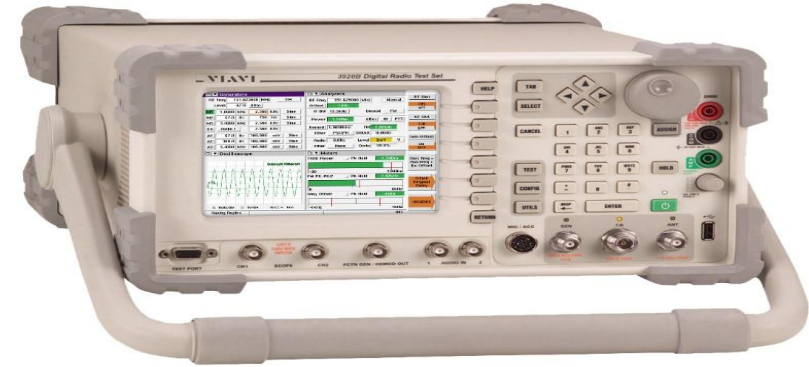
3920B Radio Test Platform

What is New

- Additional Auto-Test support for Harris and Motorola P25 radios
- Kenwood Viking and Tait P25 radios added to the Auto-Test family

P25 Interoperability solution

- DES and AES encryption
- Trunking and Phase 2 support
- Vocoder

Benefits to Public Safety

- Ensure outdoor RF signal coverage with signal strength mapping solutions
- Complete RF testing of P25 subscribers and infrastructure

https://www.viavisolutions.com/en-us/products/3920b-series-analog-and-digital-radio-test-platform

R8200 New LMR Service Monitor with VNA

What is New

- Single Port Vector Network Analyzer: The only LMR test set to include a VNA

- Includes multiple general use options

    - Remote Front Panel
    - Extended Gen Port Output
    - Process Automation Toolkit ("PAT")

P25 Interoperability solution

- P25 Phase 1 Conventional Test Option
- P25 Phase 1 Trunking Test Option
- P25 Phase 2 Test Option

Benefits to Public Safety

- Perform comprehensive subscriber and network testing with a single instrument

- Save space by combining multiple instruments into one portable device

FREEDOM

FREEDOM

www.astronics.com/lmr

Network Monitoring and In-Building Network Testing

https://www.pctel.com/ptig

What is New

- **SeeHawk™ Monitor** – Improved spectrum monitoring and uplink testing, plus new downlink monitoring feature
- **Public Safety Network Testing Solution** – Uplink testing & in-building network commissioning test enhancements
- **SeeHawk™ Central cloud platform** – In-building coverage approval system, BDA tracking, and analytics

P25 Interoperability solution

- In-building coverage and commissioning testing & reporting based on FCC, NFPA, IFC & local regulations
- Automated indoor/outdoor P25 uplink/downlink testing
- Automated spectrum monitoring

Benefits to Public Safety

- Verify and manage indoor/outdoor critical communications coverage and systems (DAS/BDA/ERCES)
- Quickly identify interference throughout the network

▲ SeeHawk™ Monitor

▲ Public Safety Network Testing Solution   ▲ SeeHawk™ Central

Valid8 P25 ISSI/CSSI Test Solution

What is New

- Security Test Suites
  - Security test Consoles or RFSSs on CSSI and ISSI
- Digital Twin Emulators
  - Emulate RFSS, Console, Radios, LTE-LMR IWF, 5G, 4G, IMS network elements
- Passive Conformance
  - Verify compliance of equipment on the network without disconnecting anything
  - Online (live) mode works via a network tap point
  - Offline mode works by analyzing a PCAP file, isolating the DUT and reporting the test result

P25 Interoperability Solution

- Use Valid8's Pre-Canned Test Scenarios to Ensure Interoperability with Other Vendor Devices

Benefits to Public Safety

- Real World Testing with Multiple form-factors
- Flexibility to Customize Test Scenarios
- Upgradable to MCX, 5G, NG911, P25 Cyber-Security Testing Suites

ProtocolEngine 9.3.17
6/1/2023, 10:46:50 AM
SUCCESS
Rating AAA

https://www.valid8.com/solutions-for/test-mcx
https://www.valid8.com/datasheets/p25-issi-cssi-conformance

PX-900 Portable Instrument

What is New

- The DiagnostX PX-900 instrument is a portable self-calibrating radio waveform analyzer that can remotely evaluate radios - while in use in the field.

P25 Interoperability Solution

- Trunk or Conventional

- VHF; UHF; 700/800 MHz (uplink frequencies only); and 900 MHz

Benefits to Public Safety

- The PX-900 measures a radio's alignment and operating characteristics long-range, Over-The-Air, in real-time without user intervention or impact on the radio system.

- Generates reports identifying radios requiring service and validates other radios operating within specification.

The Future of Radio Maintenance is Here!

Visit LocusUSA at Booth 430 to learn more
https://www.locususa.com

You're counting on interoperability…
Do you really have it?

WHAT IS NEW

- **Installed System Verification**
- **ISSI/CSSI Interoperability Field Testing**
- **Cyber Security Reviews & Mitigation**

P25 INTEROPERABILITY SOLUTION

- **DHS Accredited Interoperability Testing**
- **"Onsite testing"**
- **"Virtual" remote testing**

BENEFITS TO PUBLIC SAFETY

- **Verify interoperability and compliance after changes occur in your P25 LMR system.**
- **Verify revised hardware, software, firmware.**
- **Test new radios added with old radios.**
- **Validate new manufacturer radios added.**
- **Analyze new routers, cables, servers, etc**
- **Interoperability and P25 compliance could be affected.**

Booth1411 APCO 2023

**The Only Independent
DHS Recognized P25 Test lab**

www.p25testing.com

www.compliancetesting.com

Chris Lougee
LMR Industry Business Development
Compliance Testing LLC
1724 S. Nevada Way
Mesa, AZ 85204

206-790-0790
chrisl@compliancetesting.com

P25 Enhanced Vocoder Software and Hardware

What is New

- Licensing for variety of processors and OS's
- SIMD Optimized Libraries
- Multi-Channel P25 hardware

P25 Interoperability solution

- Enhanced Dual-Rate Vocoder
- Parametric Rate Converter

Benefits to Public Safety

- Meets latest P25 requirements for voice quality
- Interoperability and assured quality

P25 Products & Services	www.Project25.org Member Web Address	Fixed Stations & Repeaters	Mobile & Portable Radios	Antennas	Vehicle Repeaters	Consoles	Networks	Software	Test Equipment	Systems Integration	Consultant Services
Corporate PTIG Members											
CANYON AEROCONNECT	http://www.canyonaeroconnect.com		■								
COMPLIANCE TESTING	www.compliancetesting.com								■		■
CTA CONSULTANTS	http://www.cta-c.com									■	■
DVSI	www.dvsinc.com							■			
ESChat	http://www.eschat.com		■					■			■
FEDERAL ENGINEERING	www.fedeng.com										■
GME- (standard comm pty ltd)	www.gme.net.au	■	■								
INTER TALK SYSTEMS	www.intertalksystems.com					■					
LEONARDO	http://www.leonardocompany-us.com	■	■				■			■	
LOCUSUSA	www.locususa.com								■		
MINDSHARE by CSS	http://www.css-mindshare.com					■					
MISSION CRITICAL PARTNERS	http://www.missioncriticalpartners.com										■
PCTEL	http://www.pctel.com							■	■		
POWERTRUNK	www.powertrunk.com	■				■	■			■	
RFI TECHNOLOGY SOLUTIONS	https://www.rfiamericas.com/						■			■	
SIMOCO	http://www.simocowirelesssolutions.com	■	■		■	■	■	■	■		■
SKYMIRA	http://WWW.SKYMIRA.COM	■			■		■	■		■	■
STI-CO ANTENNA SYS	https://sti-co.com/			■						■	■
TELEVATE	www.televate.com									■	■
TELEX (BOSCH)	www.telex.com					■	■				
VALID8	http://www.valid8.com								■		
39		**15**	**14**	**1**	**7**	**13**	**14**	**9**	**8**	**16**	**13**

P25 Products & Services	www.Project25.org Member Web Address	Fixed Stations & Repeaters	Mobile & Portable Radios	Antennas	Vehicle Repeaters	Consoles	Networks	Software	Test Equipment	Systems Integration	Consultant Services
Corporate PTIG Members											
CANYON AEROCONNECT	http://www.canyonaeroconnect.com		X								
COMPLIANCE TESTING	www.compliancetesting.com								X		X
CTA CONSULTANTS	http://www.cta-c.com									X	X
DVSI	www.dvsinc.com							X			
ESChat	http://www.eschat.com		X					X			X
FEDERAL ENGINEERING	www.fedeng.com										X
GME- (standard comm pty ltd)	www.gme.net.au	X	X								
INTER TALK SYSTEMS	www.intertalksystems.com					X					
LEONARDO	http://www.leonardocompany-us.com	X	X				X			X	
LOCUSUSA	www.locususa.com								X		
MINDSHARE by CSS	http://www.css-mindshare.com					X					
MISSION CRITICAL PARTNERS	http://www.missioncriticalpartners.com										X
PCTEL	http://www.pctel.com							X	X		
POWERTRUNK	www.powertrunk.com	X				X	X			X	
RFI TECHNOLOGY SOLUTIONS	https://www.rfiamericas.com/						X			X	
SIMOCO	http://www.simocowirelesssolutions.com	X	X		X	X	X	X	X	X	X
SKYMIRA	http://WWW.SKYMIRA.COM	X			X		X	X		X	X
STI-CO ANTENNA SYS	https://sti-co.com/			X						X	X
TELEVATE	www.televate.com									X	X
TELEX (BOSCH)	www.telex.com					X	X				
VALID8	http://www.valid8.com								X		
39		15	14	1	7	13	14	9	8	16	13

P25 New Product Trends

- **P25 LMR Interoperability with LTE Broadband Data**
  - Multi mode P25/LTE Portable radios
  - Mobile P25 radio with Wi-Fi and LTE connectivity
  - New P25 Consoles connect P25 and LTE technologies

- **Multi-Band P25 Portable Radios** (VHF/UHF/700/800 MHz) New products are P25 Phase 1 and Phase 2 capable

- Voice recording in radios

- Scalable, Configurable P25 Airborne Radios

P25 New Product Trends

- **Deployable, mixed-mode, P25 repeaters for Emergency Ops**

- **P25 Antenna Site Monitoring**

- **"Over the Air" radio maintenance for P25 Systems**

- **"Cloud based" Asset management for P25 Systems**

- **"Cloud based" Dispatch in the field**

- **New P25 Location Services**

- **P25 enhanced Vocoder Software**

www.project25.org