iSecCOM: mission-critical secure communications

Meeting both security and safety requirements in one system, iSecCOM provides single and dual security domain (RED/BLACK) IP voice communications for mission-critical tactical and operational command and control systems, serving NATO and other military forces around the world. Adhering to military and industry standards, it gives operators everything they need for effective mission management across telephone, intercom, radio, recording, data and conference services, all via a single operator position with customisable HMI.

Key features

Proven security and reliability

The iSecCOM secure audio switch (iSAS) ensures exceptional security and secure domain separation. iSAS is the world's smallest secure audio switch and it is certified by the German Federal Office for Information Security (BSI) in accordance to Common Criteria (CC) EAL4+. Simultaneous operation within RED/BLACK security domains combines security with convenience. Integration of external Government Furnished Equipment (GFE) crypto equipment allows exchange of classified information with other systems.

Failsafe resilience

A field-proven, distributed design with no single point of failure ensures highly reliable resilience, supporting continuous operations even in the event of a command centre failure. Developed in line with EUROCAE ED-136/137/138/153 [SWAL 3] standards, iSecCOM enables convergence at the networking level, adding a high degree of flexibility without compromising on field-proven robustness and safety.
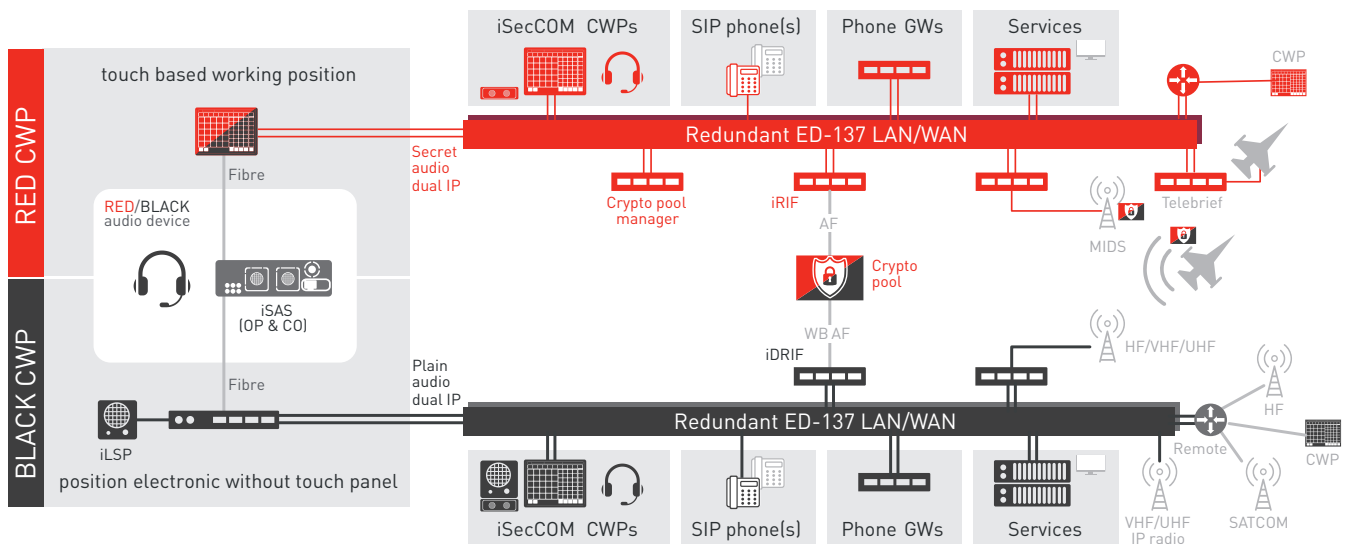
Seamless integration

Supporting industry standards for VoIP (e.g. SIP, EUROCAE ED-137/138), iSecCOM can be integrated into existing networks and is designed for full interoperability with third-party gateways, radios, SIP phones, collaboration applications, as well as legal recording and post analysis of voice, data, screens and ambiance.

iSecCOM at a glance

- Enables secure comms up to NATO secret level across multiple domains

- EUROCAE ED-136/137/138/153 [SWAL 3]

- RED/BLACK VCS with with CC EAL4+ & ADV_INT.3 & ASE_TSS.2 & AVA_VAN.5

- Flexible and scalable architecture

- Mobile, deployable and static command posts

- Seamless compatibility with any technology

- Increase situational awareness

- Radio vendor agnostic integration for voice and data

- Reduce load on operators

FREQUENTIS

FOR A SAFER WORLD

Diagram labels

RED CWP

touch based working position

iSecCOM CWPs | SIP phone(s) | Phone GWs | Services | CWP

Redundant ED-137 LAN/WAN

Secret audio dual IP

Fibre

RED/BLACK audio device

iSAS (OP & CO)

Crypto pool manager | iRIF | Telebrief | MIDS

AF

Crypto pool

WB AF

BLACK CWP

Fibre

iDRIF

Plain audio dual IP

iLSP

position electronic without touch panel

Redundant ED-137 LAN/WAN

HF/VHF/UHF | HF | Remote | CWP

iSecCOM CWPs | SIP phone(s) | Phone GWs | Services | VHF/UHF IP radio | SATCOM

Benefits

Superior mission effectiveness

Give your operators an easy-to-use, comprehensive and secure toolset that provides everything needed for effective mission management, securely combining RED/BLACK voice communications in one binaural headset and HMI.

Non-stop availability where it matters

Field-proven, highly secure and proven technology that is designed with no single point of failure and built-in redundancy to ensure continuity of service.

De-risked operations

Ensure value into the future with an open-standards-compliant IP solution that offers a proven track record of interoperability, guaranteed long-term support, unparalleled data security and straightforward scalability.

Low latency

Latency of less than 75ms results in no disturbance and no background noise on the ATC radio frequency.

Technical specifications

Availability	At least 0.99999
Configuration	Fully redundant single domain only, or dual domain (RED/BLACK)
Power supply	Redundant: two separate power supply lines recommended
Standards compliance	NATO SDIP-27[1] Level C and NATO SDIP-29[1], ED-136, ED-137, ED-138 and ED-153 SWAL3, ICAO-Standards Annex 10
Radio interfaces	VHF/UHF/HF, HAVE QUICK I/II, SATURN, ECCM. Fully remote-controlled
Phone interfaces	Supplied: PRI, BRI (T0), MFC, E&M, FXS, FXO, LB Supported: 3rd-party COTS IP voice gateways, e.g. Mediant or CISCO router
End-to-end encryption	Supports TRANSEC & COMSEC modes, VINSON-compatible crypto devices connected to Frequentis crypto gateways, dynamic crypto allocation CC EAL4+-certified secure audio switch
Recording interfaces	Integration of real-time voice and data recorders according to EUROCAE ED-137
Others	Integration of 3rd-party gateways, SIP phones or collaboration applications

1) valid for secure audio switch