Product brief: iSecCOM
Mission-critical IP comms for ATC

Meeting both security and safety requirements in one system, iSecCOM provides safety-critical air/ground and ground/ground, single and dual security domain (RED/BLACK) IP voice communication for air traffic control (ATC) services. Adhering to military and industry standards, it gives operators everything they need for effective air traffic management across radio, telephone, intercom, recording, data and conference services, via a single operator position with customisable HMI.

Key features

Fulfilling future needs

The iSecCOM voice communication system (VCS) for defence applications is specifically designed to respond to the requirements of military customers. Its product development, lifecycle support and maintenance processes ensure that iSecCOM will remain a cost-efficient long-term investment.

Modularity and scalability

Thanks to a high degree of scalability, modularity and flexibility, the system can be individually tailored to customer concept of operations for tower, approach or centre use, as well as for fixed and deployed sites.

Safety

Frequentis is the air traffic management communications technology leader and the only VCS provider to comply with EUROCAE ED-153 software safety assurance guidelines. The ED-153 defines practices to assure quality and safety of an air navigation service system during its entire lifecycle from system definition to decommissioning.

Audio quality

iSecCOM provides latency free and crystal clear audio quality.

iSecCOM at a glance

- End-to-end IP-based architecture

- Shared communication and information services with flexible network layouts

- EUROCAE ED-137/138 interoperability

- System robustness and resilience thanks to distributed services and decentralised call control for most components, paired with redundant and failsafe system architecture

- Trusted and certified secure audio switch

- Field proven IT-solution by several NATO and non-NATO members

- Supports from one to more than several hundred controller working positions

FREQUENTIS
FOR A SAFER WORLD
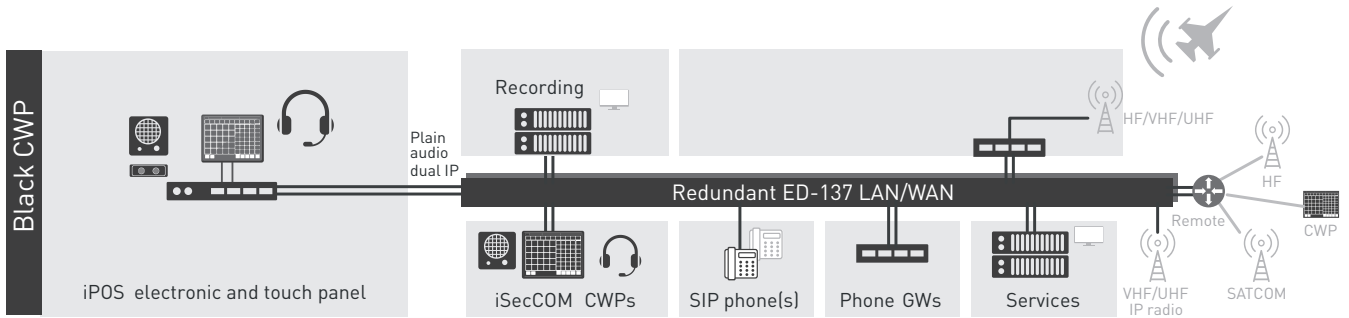
Benefits

Superior efficiency in military ATC

Give controllers an easy-to-use, comprehensive and reliable toolset that provides everything needed to support effective air traffic management combining the features of RED and BLACK voice communications in one controller working position.

Non-stop availability where it matters

The field-proven, bulletproof technology is designed without a single point of failure and built-in redundancy to ensure continuity of service and support your mission success.

De-risked operations

Ensure retention in 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], ED136, ED137, ED 138 and ED153 SWAL3, ICAO-Standards Annex 10
Radio interfaces	VHF/UHF/HF, HAVE QUICK I/II, SATURN, ECCM[2]. 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 COMSEC between centre and aircraft, and VINSON-compatible crypto devices connected to Frequentis crypto gateways and 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, 2 other ECCM modes on request