

Product brief: IVSR

FAA Voice Switch

IVSR is the latest integrated voice switching communication system for FAA air traffic control towers and TRACONs throughout the United States. The system provides air traffic control specialists and traffic managers with access to all communications circuits necessary to safely steer aircraft throughout the US national airspace. The Frequentis system connects incoming and outgoing communication lines via a non-blocking switching matrix to the controller's workstation using innovative user interface design to optimize controller efficiency.

Key features

Largest voice switch program in the world

Under the IVSR deployment program, installations to date have reached over 190 systems, equipping 35% of all US towers with a total of more than 1,300 controller positions. Program deliveries will continue through 2022.

Highest availability of IVSR ensures safe operations in the National Airspace

IVSR provides a no-single-point of failure architecture, featuring full redundancy for all critical system parts, thus providing ATC controllers with vital communications capabilities even during degraded operations. The system achieves an availability of 99.9999% representing less than 32 seconds of downtime per year.

IVSR supports the latest NextGen facilities

IVSR supports the latest NextGen facilities such as Dallas (including the TRACON and North Texas metroplex towers providing more than 200 working positions), San Francisco tower, Minneapolis, Houston TRACON, New York/LaGuardia and Dallas Fort Worth – one of 10 largest airports in the world.



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IVSR at a glance

- Unsurpassed scalability from the smallest level 1 airports to the largest TRACONs
- Certified interfaces to all 28 FAA telephone circuit types
- Interoperability with all FAA radios including the latest NextGen VoIP ED-137 capable model
- 24x7x365 helpdesk support
- Compliant with FAA information system security standards



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Benefits

Improved voice communications performance

Latest digital signal processing provides best voice quality and real-time user experience.

Intuitive operation

The IVSR intuitive user interface improves controller efficiency and reduces risk of user errors.

4-Jack operation supports busiest facilities in the NAS

The innovative IVSR 4-jack operation feature allows multiple operators to simultaneously use a single position supported by a multi-level priority concept. This greatly improves safe operation during peak hours in the NAS airspace without the need to install additional equipment.

VCX-IP: Technical aspects

Scalability	One to over 800 positions
Radio Services	FAA-radio main/standby, BUEC, radio operator, preemption
Telephone Services	FAA all 28 interfaces, SS1, override, large conferences, PRI0
Coordination Services	Relief-briefing, frequency add/delete, A/G G/G coupling
Supervision Functions	Supervisor recording, monitoring, missions and roles
Power	Two independent power sources 120 VAC, 30 min battery for entire system
Environmental	Compliant with latest FAA seismic requirements
IT Security	Annual tests to comply with FAA 1370.121, FISMA NIST SP 800-53
Displays	Sunlight readable tower display, patented dual touch detection reduces errors
Availability	Ai >99.9999%, less then 32 sec downtime/year, MTBF = 57 years
Support	Mobile training system, repair facility in Columbia, MD 24x7x365 helpdesk
Interoperability	NextGen digital radios, Digital Voice Recorders, VoIP Standards

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