



721S BLADE GROUND V/UHF RADIO

FLEXIBLE, AFFORDABLE, SPACE EFFICIENT

A powerhouse in a small package

Trusted, reliable communication – we know it's critical to your ground-air communications, both day-to-day and in an emergency. It's why Collins Aerospace has developed the 721S Blade ground V/UHF radio.

Part of our family of V/UHF battle management solutions, 721S Blade offers you a highly flexible, portable and space efficient solution for primary, emergency and backup AM/FM V/UHF ground-air communication.

The radio system's modular, "building block" architecture makes it easily scalable across your users' unique requirements. It provides superior radio-frequency performance in a small form factor that accommodates transportable and fixed-site applications.

Count on clear communication with the 721S Blade Clarity™ noise reduction technology. It significantly reduces background noise in transmit and receive modes by removing non-syllabic audio (e.g., cockpit/aircraft noise, heating/cooling system noise, street and office sounds, and signal interference from co-location pollution). The result is a clean and uncluttered communication signal between ground radio operator and pilot.

The 721S Blade consists of small, hot-swappable TCP/IP-based 10- or 50-watt radio frequency receiver-transmitters. Each receiver-transmitter exhibits excellent radio-frequency co-site performance, which enables deployment of multiple 721S Blade systems at one site.

With a compact size for easy deployment, 721S Blade has been fielded with numerous voice communications systems. It features a user-friendly interface for simple and intuitive operation. 721S Blade is compatible with the USAF Rome Touch Control Software, as well as ED-137 VoIP audio compatibility using the G.711 codec.



KEY FEATURES AND BENEFITS

- Compact, modular packaging
- Embedded scanning guard receiver mode
- Clarity and noise reduction algorithms increase talk power
- Full range of antenna options
- Robust, built-in test (BIT) for quick, simplified equipment status and diagnostics aid

EQUIPMENT OPTIONS

- 721S Blade
 - RT-4110 10 W V/UHF 270-3186-070
 - RT-4150 50 W V/UHF 270-3186-072
 - RT-5512 50 W V/UHF 270-3186-073
 - RT-8850 VHF 50 W FM 270-3186-075
- Electronic protection includes HAVE QUICK I/II and SATURN
- Control options
 - RCU-720 controller 270-3148-066
 - PC software 984-4799-XXXX

- Mounting chassis
 - 270-3186-060 (MMT-1000)
 Up to six 10 W radios or three 50 W radios, or a mixture of both

*Depends on application. Please contact your Collins Aerospace representative for details.

SPECIFICATIONS

Receiver-transmitter	RT-4110	RT-8850	RT-4150	RT-5512
Part number	270-3186-070	270-3186-075	270-3186-072	270-3186-073
Receive frequencies	30-512 MHz (continuous)			
Transmit frequencies	118-173.975, 225-399.975 MHz	30-87.975 MHz	118-173.975, 225-399.975 MHz	30-87.975, 118-173.975, 225-512 MHz
AM TX carrier power	10 W	25 W	50 W	50 W*
FM TX carrier power	20 W	50 W	100 W	100 W*
AC power consumption	190 W max	430 W max	430 W max	430 W max
DC power consumption	Currently not available	400 W max	400 W max	400 W max

*Transmit power is reduced by 3 dB from 30-88 and 400-512 MHz.

Transmit duty cycle	Continuous duty under all conditions Full power VSWR <2:1; up to 6 dB power reduction VSWR >2:1	Maintainability	15 minutes MTTR
Built-In-Test	Continuous fault detection (C-BIT); user initiated fault isolation (I-BIT)	Channel spacing and modulation modes	25 kHz (AM DSB, FM, FSK) 12.5 kHz (AM DSB, FM, FSK) 8.33 kHz (AM DSB in VHF ATC band)
Power input	90-250 Vac, 47-63 Hz, 1Phase	Receiver sensitivity	-103.5 dBm (1.5 µV), AM voice -108 dBm (0.9 µV), FM voice -97 dBm (3.2 µV), AM or FM WB
Cooling	Internal forced air	Stability	1.0 PPM
Temperature ranges	-30° C to +55° C operating -40° C to +85° C storage	RT control	External RCU or remote networked PC
Humidity	15% to 95% noncondensing	Audio	NB voice and WB data Balanced 600 Ohm, -20 to 0 dBm output level -20 to 0 dBm output
Reliability	>50,000 hours MTBF ground benign		

Specifications subject to change without notice.



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