



## 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 Rockwell Collins 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 that are integrated into a 19-inch rack mount transit case. 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 BENEFITS

- > Compact, modular packaging minimizes transport space and simplifies deployment
  - Lowest size, weight and power usage (SWaP) in dual-band V/UHF market
  - No radio-frequency compromise for transportable/expeditionary market space
  - 10-minute setup time in deployable configurations
  - Modular design enables easy upgrades
- > Clarity noise reduction
  - Boosts area of coverage 4X over conventional V/UHF transceivers
  - Significantly reduces operator fatigue by removing non-syllabic background noise in both transmit and receive operations
- > Embedded scanning guard receiver mode

## KEY FEATURES

- > Intuitive touchscreen menu with interactive help screens
- > Superior RX
- > 10/100 Base-T Ethernet remote-control interface for full receiver-transmitter control
- > Robust, built-in test (BIT) for quick, simplified equipment status and diagnostics aid
- > Wide-range AC input power with backup DC inverter for genset
- > Full range of antenna options
- > High mean time between failures (MTBF)

## EQUIPMENT OPTIONS

- > 721S Blade
  - RT-1410 10 W V/UHF 270-3186-070
  - RT-4150 50 W V/UHF 270-3186-072
  - RT-8850 VHF 50 W FM 270-3186-075
- > Control options
  - RCU-710 controller 270-3148-062
  - PC software 270-3148-050
- > Power\*
- > 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 Rockwell Collins representative for details.

## SPECIFICATIONS

Operating frequency	108-400 MHz 30-88 MHz (RT-8850)
Transmit power	10 W AM (carrier)/20 W FM or 50 W AM (carrier)/100 W FM 50 W FM (RT-8850) <ul style="list-style-type: none"><li>• The power output – user adjustable (20 dB range in 0.1-dB increments)</li></ul>
Transmit duty cycle	Continuous duty under all conditions Full power VSWR <2:1; up to 6 dB power reduction VSWR >2:1
Built-In-Test	Continuous fault detection (C-BIT); user initiated fault isolation (I-BIT)
Power input	90-250 Vac, 47-63 Hz, 1Phase DC power input available with optional AC/DC inverter
Cooling	Internal forced air
Temperature ranges	-30° C to +55° C operating -40° C to +85° C storage
Humidity	15% to 95% noncondensing
Reliability	>50,000 hours MTBF ground benign
Maintainability	15 minutes MTTR
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)
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
Stability	1.0 PPM
RT control external	Removable front panel control unit, RCU or remote networked PC
Audio	NB voice and WB data Balanced 600 Ohm, -10 to +10 dBm output level Adjustable in approx. 1 dB steps

*Specifications subject to change without notice.*

## Building trust every day.

Rockwell Collins delivers innovative aviation and high-integrity solutions that transform commercial and government customers' futures worldwide. Backed by a global network of service and support, we are deeply committed to putting our solutions to work for you, whenever and wherever you need us. In this way, working together, we build trust. Every day.

## For more information, contact:

Rockwell Collins  
400 Collins Road NE  
Cedar Rapids, Iowa 52498  
800.321.2223 | +1.319.295.5100  
fax: +1.319.378.1172  
721S\_SmartBlade@rockwellcollins.com  
rockwellcollins.com

**Rockwell  
Collins**

Building trust every day