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RT-7000

Airborne Tactical Radio
Remote-Mount Radio (RMR)
Multi Band Multi Transceiver



RT-7000

Remote-Mount Radio (RMR) Multi Band, Multi Transceiver

Canyon RT-7000 Airborne Tactical Radio is part of a comprehensive and flexible aircraft communications system. Installation options include panel, cabin, and remote positions.

RMR, Remote-Mount Radio

The RT-7000RMR is an LRU designed to be rack-mounted in fixed-wing aircraft or helicopters. Each RMR can contain three independent transceivers, and will interface with up to two handheld radios. Two variants of the RMR mounting rack are available: single rack to accommodate one RMR, and a dual rack to accommodate two RMRs.

Audio Panel

The RMR is designed to interface with standard aircraft audio systems. Channel 1 may be configured to interface directly with a headset.

Antennas

The RMR has an independent coax output for each installed transceiver.

The coax outputs may be connected to a variety of antennas and/or switches.

Incomparable Versatility

The architecture of the RMR is designed to accommodate up to three radio modules, covering the entire 29.7 – 960 MHz spectrum, delivering unsurpassed communication coverage.

The configuration may be any combination of:

- CanyonWideband Transceiver
- Motorola APX 8000
- Canyon Search and Rescue Module

Two RMRs (totaling up to six internal modules and two external handhelds) may be controlled with a single RCDU.

RT-7000 Airborne Tactical Radio Family

Whatever your mission or aircraft, the RT-7000 family has you covered from nose-to-tail:

- Panel-Mount Radio (PMR) – User-interfaced radio, designed for cockpit installation and use by Pilot or Co-pilot.
- Remote Control Display Unit (RCDU) – User-interfaced radio, designed for secondary-position installation, such as the cabin, and use by EMTs, TFOs, etc.
- Remote-Mount Radio (RMR) – Designed for remote installation, and is controllable by a PMR, RCDU, or MCDU. An interface control document is available for selected MCDU's.

RMR



PMR



RCDU



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SPECIFICATIONS

| | |
|--------------------|-----------------------------|
| Tunability | 1.25 kHz Incremental Tuning |
| Mode | FM/AM/P25/Trunking |
| Altitude | 55,000 feet |
| Temperature | -40°C to + 55°C |
| Channeling | 6.25/8.33/12.5/25.0 kHz |

| Wideband Transceiver | Frequency Bands |
|----------------------|--------------------------|
| 30.000-50.000 MHz | LMR |
| 30.000-88.000 MHz | Military |
| 108.000-118.000 MHz | VOR Voice |
| 118.000-152.000 MHz | ATC and Civil Air Patrol |
| 136.000-174.000 MHz | LMR |
| 156.000-174.000 MHz | Maritime |
| 225.000-400.000 MHz | Military |
| 380.000-520.000 MHz | LMR |
| 764.000-960.000 MHz | LMR |

Receive and/or transmit access to frequencies in each band may be configured

APX-8000 Module Bands

| | |
|-------------|------------|
| 136-174 MHz | P25 VHF FM |
| 380-520 MHz | P25 UHF FM |
| 764-870 MHz | P25 7/800 |

Search and Rescue Module Frequencies

| | |
|-------------|----------------------------------|
| 121.5 MHz | AM (Civil Aircraft Emergency) |
| 243.0 MHz | AM (Military Aircraft Emergency) |
| 156.8 MHz | FM (Marine Voice Emergency) |
| 156.525 MHz | FSK (Marine Digital Emergency) |

Power Requirements

| | |
|------------------------|--------------------|
| Nominal Input Voltage: | 27.5 ±0.5 VDC |
| Range: | 18 to 33 VDC input |
| Current: TX (normal) | 10 amps max |
| RX (idle): | 4 amps typical |

Transmit Power

- ATC COMS – 4W Min
- AM – 4W Min
- FM – 5-8W*
- P25 Conventional –5-8W*
- Motorola modules - VHF - 6W
 - UHF – 5W
 - 700/800 MHz – 3W
- Frequency Dependent
- Contact us about add-on external amplification options

APCO P25

- All P25 Bands
 - Conventional Common Air Interface (CAI)
 - Phase 1, 2 Trunking
 - Analog Trunking (SmartZone, SmartNet)FM/AM/P25/Trunking

Encryption

- FIPS 140-2, Level 2/3
- P25 AES & DES
- Analog DES, DES-XL, DVP
- P25 OTAR
- Multikey





Dimensions

| | Height | Length | Width |
|------------|--------|--------|-------|
| Single RMR | 4.38" | 8.24" | 5.00" |
| Double RMR | 4.38" | 16.48" | 5.00" |

Weight

Single RMR

- < 10 lbs. (4.5 kg)
- 1 module: 6.8 lbs. (3.1 kg)
- 2 modules: 7.9 lbs. (3.6 kg)
- 3 modules: 8.9 lbs (4.0 kg)

Weight

Double RMR

- < 20 lbs. (9.0 kg)
- 2 modules: 13.6 lbs. (6.2 kg)
- 4 modules: 15.8 lbs. (7.2 kg)
- 6 modules: 17.8 lbs. (8.0 kg)

Certification

- DO-160G/EUROCAE/ED14 test rated FCC Part 15, 22, 80, 87, 90
- EU (RED) Certification – Future
- Level C EUROCAE ED-12B
- RTCA DO-178C/EUROCAE/ED12
- RTCA DO-254/EUROCAE/ED80
- FAA TSO-C169a
- FAA TSO-113b
- EASA ETSOs by Equivalence
- EASA ETSO-2C169a *
- FAA STC/PMA – Pending
- FCC Grant Approval – Certified to parts 15, 22, 80, 87, and 90
- Industry Canada (IC) - Pending
- Anatel Brazil Certification – Pending
- TSO Certification - Pending



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