The AM-7642/ARC and the MX-12366/ARC will enhance the proven performance of the ARC-210 communication system family — compatible with the newly emerging MUOS waveforms as well as legacy UHF SATCOM waveforms.

RADIO FREQUENCY AMPLIFIER – AM-7642/ARC

The Rockwell Collins Radio Frequency Amplifier AM-7642/ARC is part of the most current offering in the ARC-210 Beyond Line of Sight Communication System. The Mobile User Objective System (MUOS) capable AM-7642/ARC provides superior performance for amplification of voice, data and satellite communications (SATCOM) in the Ultra High Frequency (UHF) band.

The AM-7642/ARC retains the same mounting footprint and interfaces as the legacy AM-7526/ARC HPA allowing for ease of integration to existing platforms. Additionally, the new AM-7642/ARC combines the proven performance of legacy equipment with the additional capability of MUOS into one advanced package.

LOW NOISE AMPLIFIER AND TRIPLEXER – MX-12366/ARC

The Rockwell Collins Low Noise Amplifier and Triplexer MX-12366/ARC is part of the most current offering in the ARC-210 Beyond Line of Sight Communication System. The Mobile User Objective System (MUOS) capable MX-12366/ARC provides superior performance for transmit to receive isolation and low noise amplification of voice, data, and satellite communications (SATCOM) in the Ultra High Frequency (UHF) band. Additionally, a selectable integrated switch is provided for use with high/low angle antennas.

The MX-12366/ARC retains the same mounting footprint as the legacy MX-11745/ARC and MX-11641/ARC LNA/ Diplexer. Furthermore, the MX-12366/ARC operates with legacy UHF and MUOS SATCOM.
FEATURES

AM-7642/ARC

- Modes of operation
  - Legacy UHF SATCOM, MUOS using WCDMA modulation AM, Have Quick, SATURN, STANAG
- Frequency range (transmit)
  - 280-320 MHz
  - 243-270 MHz
  - 225-400 MHz
- Frequency range (receive)
  - 30-512 MHz
- Full duplex MUOS continuous full-power transmit duty cycle to 55°C
- Same footprint and functional replacement for AM-7526
- Supports MUOS spectrum adaptation

MX-12366/ARC

- Modes of operation
  - Legacy UHF SATCOM (half duplex) MUOS (full duplex when used with AM-7642)
- Frequency range (transmit)
  - 280-320 MHz (SATCOM and MUOS)
- Frequency range (receive)
  - 243-270 MHz (SATCOM)
  - 340-380 MHz (MUOS)
- Full duplex operation
- Same footprint and functional replacement for MX-11745/ARC
- Integrated hi/lo angle, RT-configured antenna selection

SPECIFICATIONS

AM-7642/ARC

- RF output power
  - 125 W FM
  - 125 W average legacy (SATCOM)
  - 50 W average (SATCOM and MUOS)
  - 40 W AM @ 90% mod
- Operating temperature range
  - -40°C to +71°C
- Size max
  - 10.0” x 5.0” x 6.5”
- Weight
  - 15.0 lbs max
- Power interface
  - +28 VDC
- Qualification testing
  - MIL-STD 461F, MIL-STD-704F (no isolated DC return)
  - MIL-STD-810F

MX-12366/ARC

- Operating temperature range
  - -40°C to +71°C
- Size max
  - 7.38” x 5.55” x 3.15”
- Weight
  - 3.75 lbs max
- Power interface
  - +28 VDC
- TX insertion loss
  - 1.2 dB max
- TX VSWR
  - <1.5
- RX noise figure
  - 3.0 dB max MUOS/
  - 3.5 dB UHF SATCOM
- Full qualification testing
  - MIL-STD-461F, MIL-STD-704F (no isolated DC return)
  - MIL-STD-810F
- RX gain
  - 30 dB min (MUOS)
  - 23.5 dB min (legacy)
- RX VSWR
  - <1.5 (legacy)
  - <1.6 (MUOS)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Building trust every day.

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

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