

# RT-2073(C) SECURE CDL ISR (SCISR) RADIO

# ADVANCED CONNECTIVITY

# **Enhancing warfighter** capabilities

Collins Aerospace SCISR communications radios are leading the way in radio communication technology. Reliable, secure and cutting-edge communication is key to your success in today's advanced battlespace and for reassurance in future conflicts. The RT-2073(C) SCISR communications radio is the latest and most capable software-defined radio receiver-transmitter.

Enhancing warfighter capabilities, today and in the future, the RT-2073(C) SCISR radio offers advanced connectivity to transmit your mission critical data. The user-friendly application ensures ease-of-use in critical situations. You can rely on the radio data transfer connections to be swift and secure, giving you the edge that you need to succeed. Having secure data transfer will improve the effectiveness of every mission.

The SCISR radio provides low-cost and lightweight wideband data link capability that

is adaptable to a wide range of applications. Configured as either a ground or airborne terminal, it can be matched with a variety of antenna and power amplifiers to meet virtually any application that calls for wideband data throughput. The link is Type-1 encrypted with the NSA-provided CCM-700A device. The standard network interfaces and built-in router enable all the SCISR radios to be net-ready. Collins Aerospace RT-2073(C) SCISR radios give you a competitive advantage in today's battlespaces.

In addition to BE-CDL waveforms, further enhancements such as legacy To Be Sunset (TBS) waveforms are added to the baseline. Due to the DoD mandate that requires all ISR data to be transported over CDL, this allows for a smooth transition as the DoD moves towards CDL compliance.

LPI/LPD is the latest enhancement by adding a direct sequence spread spectrum (DSSS) waveform. This enables RF operation in noisy and jammed environments. It also significantly decreases the RF emissions signature of the radio.

### **KEY FEATURES & BENEFITS**

- NSA Type-1 ready
- Enables proven, fully secure communication
- Small form factor, three-channel, multi-band software-defined radio
- Supports high-bandwidth connectivity for imagery and full-motion video
- Low cost, size, weight and power (SWaP)
- Non-proprietary interfaces
- High data rates (up to 45Mbps)
- STANAG 7085 Compliant



#### TECHNICAL SPECIFICATIONS

## Main radio characteristics

Length: 5.05"Width: 2.25"

• Height: 0.6"

• Weight: <8 oz.

• Input power: 10-32 VDC

• Temperature: -40 C to 70 C (operating)

-67 C to 160 C (storage)

• Environmental compliance: MIL-STD-810G and MIL-STD-461F

# Performance characteristics

Frequency: L-band: 1350 MHz – 1390 MHz

L-Band: 1755 MHz – 1850 MHz S-Band: 2025 MHz – 2500 MHz C-Band: 4400 MHZ – 4990 MHz

• Typical output power: >2 W (all bands)

• Power consumption: ~24 W

• Data rates: 200 kbps to 44.73 Mbps

# Encryption

- Type-I encryption (U.S. and Non-FVEY) for BE-CDL
- · AES for TBS and STD-CDL waveforms

### Waveforms

• Existing waveforms: BE-CDL

BE-CDL - DSSS STD-CDL

VORTEX® Native Waveform (VNW) 466 Extended Range (466ER) Tactical "predator" waveform

Two-way Timing and Ranging (TWTR)

Future waveforms: BE-CDL A2AD waveform (in process)

Spectrum sensing

CDMA

#### **Platforms**

 Applications include: Blackjack, Scan Eagle, Huey, Osprey, and other tactical and/or small UAVs and aircraft

### Interoperability

- ROVER® video
- VideoScout®
- Multiband Miniature Transceiver MMT™
- VORTEX®
- BANDIT™

# **Applications**

- ISR data dissemination
- High-Capacity Backbone (HCB)
- Streaming video

#### **External interfaces**

- 25-pin Micro-D
  - Dual 10/100 Ethernet (Qty 2)
  - DS-101
  - 10-32 VDC
- 3x SMA RF ports L, S, C Bands



Specifications subject to change without notice.



# **COLLINS AEROSPACE**

800.321.2223 | +1.319.295.5100 fax: +1.319.378.1172 learnmore@collins.com collinsaerospace.com