Rockwell Collins Airborne Data Router

*The smarter routing solution
for your cabin*

Today's business aviation operator and passengers have high expectations for connectivity options while traveling. The demand for seamless connectivity without compromises makes having a trusted provider a must. By pairing high-speed global coverage with enablement tools, such as the Rockwell Collins Airborne Data Router (ADR) from ARINCDirect^{SM}, you can take the worry out of connectivity.

The Rockwell Collins ADR is the next generation smart router, providing customers an end-to-end cabin connectivity solution. Designed specifically to meet DO-160G and DO-178B standards and requirements, this router enables flight deck and cabin connectivity for IP devices and Electronic Flight Bags (EFB). The ADR helps business aircraft operators save time and money, while improving the overall passenger connectivity experience, by keeping you connected at every flight level.

Stay connected

The compact, 2 MCU design provides wired or wireless Ethernet connectivity onboard the aircraft and enables access for multiple local area network (LAN) clients, as well as wide area network (WAN) connectivity, to multiple communications networks such as Inmarsat Ka, Viasat Ka/Ku, Inmarsat SBB, Iridium or other networks. The ADR is configured to connect to your preferred service automatically. It provides enhanced features such as data transfer optimization software and includes two channels of Iridium voice and an integrated PBX for telephony and VoIP services. Future versions will maximize both voice and data capabilities by building on existing advanced ADR features.

Manage your connectivity

The ADR's Wi-Fi can be configured as a wireless access point (WAP) for onboard user access, with two built-in radios providing 2.4 and 5.0 GHz simultaneously. It can also be configured as a client to provide connectivity to ground based wireless networks while at the gate. You have the ability to assign separate SSID's to Wi-Fi signals providing you with the ability to manage who connects to the aircraft network and when, allowing you to better control costs. In addition to Wi-Fi connectivity, the ADR offers 3G/4G/LTE GSM cellular service that can be used for Internet access and file transfers when the aircraft is on the ground. Equipped with dual SIM card slots, you can use your own GSM cards or those provided by your service provider.

Futureproof your aircraft

The ADR is designed to be the only cabin communications system your aircraft will need, since it is app-based and created with next generation processors in mind. The ADR provides you the opportunity to add or upgrade modules as they become available without replacing the router. Our router is also interoperable with other service providers, allowing you the freedom to select the provider of your choice without being locked into using specific hardware.

Small footprint

The ADR offers customers a single configurable unit that can be tailored to fit their specific requirements. These features range from simple voice functions to office capabilities in one single small footprint LRU. This allows the ADR to be installed in most airframes.

Why the ADR from Rockwell Collins' ARINCDirect^{SM}

> Flexible design for use with any service provider

> Bandwidth allocation options

> Supports Wi-Fi enabled devices

> Data compression and acceleration

> SATCOM routing and network access

> 3G/4G GSM connectivity to multiple service providers

ARINCDirect^{SM}

Value-added products and services

Rockwell Collins' ARINCDirect offers extensive experience, value-based services and solutions to meet all of your cabin communication needs.

ARINCDirect Wi-Fi call and text

The AD Wi-Fi call and text app from Rockwell Collins' ARINCDirect allows you to place and receive calls and texts on your personal cell phone, using your own number anywhere in the world. The app utilizes your broadband Inmarsat (i.e. SBB and JX) and Viasat Mobile Broadband service connection from your aircraft.

Acceleration and compression

With our acceleration and compression, you can add 100–400 percent bandwidth capacity to your cabin network, sending and receiving more data in a shorter period of time. That means lower costs and an improved customer experience.

ADConnect VoIP app

ADConnect creates a bridge between onboard aircraft communications technology and the smartphone, enabling passengers to call anywhere in the world. Using this innovative technology, the passenger's phone becomes an aircraft satellite phone and eliminates the need for business jet operators to install costly aircraft-mounted telephones onboard. Your passengers can now call someone just as if they were on the ground.

ARINCDirect Cabin Connect

Our exclusive ARINCDirect Cabin Connect service allows aircraft operators to control SATCOM operating costs through direct credit card payments. Cabin Connect is available to all ARINCDirect SwiftBroadband (SBB) customers regardless of equipment.
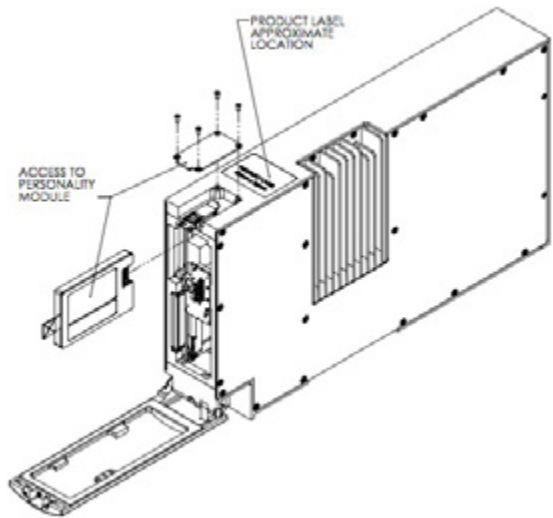
ARINCDirect Dial

ARINCDirect Dial is a ground-to-air service that provides your aircraft or fleet with a standard local phone number which routes calls dynamically to any handset in the aircraft based on the caller's selection. An international option lets you pick local numbers from hundreds of cities and countries worldwide.

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ADR features

> Multiple network solution for Inmarsat Ka, Viasat Ka/Ku, Inmarsat SBB, Iridium and 3G/4G LTE GSM on the ground

> Wired Ethernet Support – 8 configuration Ethernet ports (5 x - 10/100BaseT, 3 x – 10/100/1000BaseT)

> 802.11 a/b/g/n/ac Dual-Band (2.4 and 5.0 GHz) Wi-Fi
> – Supports multiple Wi-Fi Network SSID's to allow for separate crew, guest or VIP networks

> 3G/4G LTE GSM service can be used for Internet access and file transfers when the aircraft is on the ground, with 2 SIM Module allowing for either Service Provider or customer supplied GSM cards

> Discrete I/O Support (8 in/8 out)

> Available ARINC 429 interfaces (2 RX/1TX)

> 80GB onboard SSD (with options to expand to 800GB)

> Full PBX functionality for automatic cascading between the various systems and cabin call routing

> Supports direct CEPT-E1 interface for Classic Aero-H voice calls, direct 4-wire interface for cockpit calls, dual ISDN for AMBE2+, FXO, FXS and DTE

> Supports VoIP protocol for IP calling, SIP phones and IP FAX

> Optional built-in 2 channel Iridium Voice module with a single Iridium antenna providing cabin or cockpit voice channels

> Acceleration and compression (XipLink®) across all satellite connectivity

ADR specifications

> **Size:** 2MCU ARINC 600 Form Factor (unit dimensions: 14.74"L × 2.25"W x 7.76"H / 374.4mm L × 57.1mm W × 197.1mm H)

> **Weight:** 7.3 lbs (3.31 kg)

> **Power:** 28VDC

> **Certifications:** DO-160G and DO-178B Level E

About Rockwell Collins

Rockwell Collins is a pioneer in the development and deployment of innovative communication and aviation electronic solutions for commercial and government applications. Our comprehensive ARINCDirect suite of flight support services brings together best-in-class flight planning, international trip support, cabin connectivity and flight operations management.

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