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ASPIRE[®] 200 SATELLITE COMMUNICATIONS SYSTEM

A revolution in airborne connectivity
that allows you to fly like you live



Aspire 200 Satellite Communications System

Aspire 200 in-flight communications systems offer a broad range of connectivity options to suit a wide variety of requirements. These systems operate on the Inmarsat I-4 satellite network, which has near worldwide coverage, making them ideal for small- to mid-sized aircraft flying globally.

The systems are designed with common interfaces for flexible installation options, and ease of upgrade. Aspire 200 Systems are sold in two distinct packages: Aspire 200 IG and Aspire 200 HG. Each package provides one channel of SwiftBroadband service, enabling simultaneous cabin phone, internet access, VPN and messaging.

Aspire 200 systems provide high-performance in flight connectivity and are comprised of an HDU-200 Transceiver (High-speed Data Unit), IPLD (Integrated High-power/Low-noise Amplifier Diplexer), CCU-200 (communications convergence unit) or an optional CNX-200 Network Accelerator, and choice of antenna. Increasing the system's capability and coverage only requires replacing a low-gain antenna with a higher-gain antenna. The Aspire 200 HG system with a high-gain antenna has the added benefit of automatic Swift 64 fallback when out of I-4 coverage, to maintain connectivity wherever the aircraft flies.

High Data Rate (HDR) Software Upgrade

The HDR software upgrade is used to enhance Inmarsat L-band services. The upgrade to SwiftBroadband channels provides up to 650 Kbps per channel compared to the previous maximum data rate of 432 Kbps. This low cost solution for increasing cabin performance also reduces the effects of rotor blockage making it an ideal solution for adding high speed data to helicopters. The HDR software upgrade may be installed by a qualified user or the terminal can be returned to Honeywell for upgrade at an additional cost.

ASPIRE 200 STANDARD SYSTEM BUNDLES		
	Aspire 200 IG	Aspire 200 HG
System Components	HDU-200 Transceiver SCM CCU-200 CNX-200 (optional) AMT-1800 IPLD	HDU-200 Transceiver SCM CCU-200 CNX-200 (optional) AMT-700 or AMT-3800 IPLD
Services	One channel of SwiftBroadband voice/multiple simultaneous Background Data Services up to 332kbps and Streaming Data Services up to 128kbps (no HDR) or 500kbps with HDR	One channel of SwiftBroadband voice/multiple simultaneous Data Services up to 432kbps and Streaming Data Services up to 128kbps (no HDR) or 650kbps with HDR, plus full Swift 64 redundancy/revisionary operation

Coverage Area



Inmarsat Class 6 and 7 Coverage

Standard Components

High-speed Data Unit (HDU-200)

The Aspire HDU-200 Transceiver (HDU-200) offers one channel of SwiftBroadband service for simultaneous voice and data connectivity with the Inmarsat I-4 satellite network and fallback to Swift 64 with a high-gain antenna. HDU-200 is designed for flexible installation and can be mounted inside or outside the pressure vessel.



SPECIFICATIONS

Length	14.8"	37.6 cm
Width	2.4"	6.0 cm
Height	7.8"	19.0 cm
Weight	8.8 lb.	4.0 kg

Integrated High-power/Low-noise Amplifier Diplexer (IPLD)

The Integrated High-power/Low-noise Amplifier Diplexer (IPLD) connects the HDU-200 to the externally mounted aircraft antenna. With an integrated higher-power amplifier, it provides optimal performance of the voice and data communication services over SwiftBroadband or Swift 64, even in adverse conditions. The unit's integrated Type F diplexer ensures compliance with SwiftBroadband service requirements. The IPLD is rated for installation outside the pressure vessel.



SPECIFICATIONS

Length	7.5"	9.05 cm
Width	7.5"	9.05 cm
Height	2.5"	6.35 cm
Weight	5.3 lb.	2.4 kg

Communications Convergence Unit (CCU-200)

The Communications Convergence Unit (CCU-200) is a full-service multi-port router, Wi-Fi® Access Point (802.11 a/b/g) and full-featured PBX (digital and analogue) that supports VoIP, phone directory, call forwarding and three-way calling. The component provides network and telephony connectivity to multiple cabin users with Swift 64, SwiftBroadband systems and offers programmable, digital I/O.



SPECIFICATIONS

Length	9.0"	22.68 cm
Width	6.0"	15.24 cm
Height	1.0"	2.54 cm
Weight	3.97 lb.	1.80 kg

SATCOM Configuration Module (SCM)

The Satcom Configuration Module (SCM) stores all configuration information for the HDU-200. It gives the operator the ability to seamlessly upgrade a component without the time and effort of reconfiguring the units and reprovisioning the network access.



SPECIFICATIONS

Length	4.7"	11.94 cm
Width	3.5"	8.89 cm
Height	1.0"	2.54 cm
Weight	0.5 lb.	0.227 kg

Antenna Options

Omni Low-gain Blade Antenna (LGA)

The Omni Low-gain Blade Antenna is a low profile Inmarsat antenna offering up to 200 kbps of SwiftBroadband voice and data service as part of the Aspire 200 LG communications system. Small and light, it is installed on top of the aircraft fuselage and connects to the IPLD.



SPECIFICATIONS

Length	4.57"	11.6 cm
Width	4.25"	10.79 cm
Height	1.10"	29.74 cm
Weight	1.5 lb.	0.68 kg

AMT-3800 High-gain Antenna (HGA)

The AMT-3800 is an ARINC 781 high-gain antenna offering up to 432 kbps of voice and data service over the Inmarsat satellite network. It is mounted on top of the fuselage and connects to the IPLD. The antenna's phased array technology maintains gain at very low angles and meets stringent SwiftBroadband Passive Intermodulation (PIM) requirements.



SPECIFICATIONS

Length	43.0"	109.2 cm
Width	14.3"	36.3 cm
Height	2.5"	6.35 cm
Weight	19.8 lb.	9.0 kg

AMT-1800 Intermediate-gain Antenna (IGA)

The AMT-1800 is the smallest available Class 7 ARINC781 intermediate-gain Inmarsat antenna that offers up to 332 kbps voice and data service as a part of the Aspire 200 IG communications system. The AMT-1800 IGA operates over the extended L-band frequency range to support operation with the new Inmarsat Alphasat satellite. The antenna's phasedarray technology maintains gain at very low angles and meets stringent SwiftBroadband Passive Intermodulation (PIM) requirements.

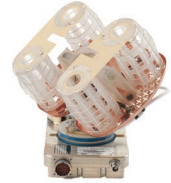


SPECIFICATIONS

Length	34.5"	87.6 cm
Width	9.5"	24.1 cm
Height	2.5"	6.4 cm
Weight	11.7 lb.	5.3 kg

AMT-700 High-gain Antenna (HGA)

The AMT-700 is a complete ARINC 781 high-gain antenna offering up to 432 kbps of voice and data services over the Inmarsat satellite network. Connected to the IPLD and installed on the empennage of an aircraft's tail, the antenna's technology and design (U.S. patent pending) result in the highest gain of any Inmarsat Mechanical High-gain Antenna – achieving greater than 13.5 dBic over the Inmarsat networks.



SPECIFICATIONS

Length	10.0"	25.4 cm
Width	10.0"	25.4 cm
Height	9.7"	24.64 cm
Weight	4.3 lb.	1.95 kg

Honeywell's range of Inmarsat antennas fits a wide range of aircraft types using a variety of fuselage adapters and radomes.

Aspire 200 IG System Diagram



Enhance system performance with an optional CNX-250 Network Accelerator

CNX[®]-250 Network Accelerator

The CNX-250 Cabin Gateway is a multi-port network router with a data accelerator module that acts as the communications hub for all aircraft data links. The appliance increases the number of network users, the strength of encryption and the speed (data acceleration) of a satellite communication or air-to-ground system.

Features

The CNX-250 provides a single cabin network based on Ethernet that supports high-speed data and VoIP communications and is scalable to support future growth and system expansion.

- Next Generation Acceleration/Compression technology
- Multi-WAN support
- 2x ISDN BRI ST
- 3G/4G connectivity (on ground only)
- Wi-Fi ON/OFF discrete
- Streaming class QoS management
- VoIP support with VoIP trunking
- Reliability 30,000 MTBF



SPECIFICATIONS		
Length	8.6"	21.59 cm
Width	12.7"	35.05 cm
With brackets:	15.4"	39.10 cm
Height	3.7"	9.40 cm
Weight	8.6 lbs	3.90 kg



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