

## Aspire™ 200 Satcom System

Allows passengers and crew to be connected during flight, reduces workload and sends real-time data quickly to and from the aircraft  
Possibilities of Connectivity. *Made Easy.*

# Aspire™ 200 Satcom Systems for Helicopters




Helicopter missions require constant connectivity for passengers and crew, both voice and data. When you're beyond line of sight or beyond VHF coverage area, you need dependable, reliable high-speed data connectivity. In challenging environments, low latency voice, real-time data transfer and aircraft tracking empower pilots to complete their missions successfully and safely.

Honeywell is responding to these challenges with our Aspire™ 200 Satcom System for Helicopters. The Aspire 200 satellite communications system offers 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 worldwide coverage. With the recently certified high data rate (HDR) upgrade, incorporating a long-burst interleaver, it is now ideal for helicopter operations – especially those on critical emergency medical or SAR missions.

The system is designed with common interfaces that provide flexible installation options and ease of upgrade to further increase the system's capabilities.

Honeywell's performance is unmatched and unparalleled. The Aspire 200 System with HDR can transmit more data, faster than any other L-band system. No matter what your mission – EMS, Law Enforcement, Oil and Gas, Search and Rescue, VIP – or the area of your operations, Aspire 200 System provides a high-speed data connection that is always on.

ASPIRE 200 STANDARD SYSTEM BUNDLES		
	Aspire 200 IG	Aspire 200 HG
<b>System Components</b>	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
<b>Services</b>	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
<b>Coverage Area</b>	 Inmarsat Class 6 and 7 Coverage	

## High Data Rate (HDR) S/W 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.

## 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

<b>Length</b>	14.8"	37.6 cm
<b>Width</b>	2.4"	6.0 cm
<b>Height</b>	7.8"	19.0 cm
<b>Weight</b>	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

<b>Length</b>	7.5"	9.05 cm
<b>Width</b>	7.5"	9.05 cm
<b>Height</b>	2.5"	6.35 cm
<b>Weight</b>	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

<b>Length</b>	9.0"	22.68 cm
<b>Width</b>	6.0"	15.24 cm
<b>Height</b>	1.0"	2.54 cm
<b>Weight</b>	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 reprogramming the network access.



#### SPECIFICATIONS

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

## Antenna Options

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

### 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 phased array technology maintains gain at very low angles and meets stringent SwiftBroadband Passive Intermodulation (PIM) requirements.



#### SPECIFICATIONS

<b>Length</b>	34.5"	87.6 cm
<b>Width</b>	9.5"	24.1 cm
<b>Height</b>	2.5"	6.35 cm
<b>Weight</b>	11.7 lb.	5.3 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.

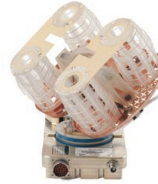


#### SPECIFICATIONS

<b>Length</b>	43.0"	109.2 cm
<b>Width</b>	14.3"	36.3 cm
<b>Height</b>	2.5"	6.35 cm
<b>Weight</b>	19.8 lb.	9.0 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

<b>Length</b>	10.0"	25.4 cm
<b>Width</b>	10.0"	25.4 cm
<b>Height</b>	9.7"	24.64 cm
<b>Weight</b>	4.3 lb.	1.95 kg

# 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 Satcom or ATG 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

