

# AIRSAT™ 1 Satcom System



AEROSPACE



## Global Communications for Every Need

Providing telephone and data communications worldwide, Honeywell's compact AIRSAT 1 satellite telephone is the only certified satellite communications tool in its price range. Voice and data services are available at a fraction of the cost of conventional Satcom.

Using the 66-satellite Iridium network, AIRSAT 1 allows you to stay in touch from anywhere in the world. Specifically designed for airborne use, AIRSAT 1 is light in weight – less than 19 pounds – and can be easily installed and certified on a wide range of aircraft.

The AIRSAT 1 system makes global communications a reality for aircraft not currently equipped with an airborne phone. In fact, it brings Satcom capability to aircraft such as helicopters, that until now, could not install a Satcom system due to antenna and airframe limitations. Alternatively, viewed as a complement to a terrestrially based airborne telephone, AIRSAT 1 offers coverage where a terrestrially based phone simply doesn't work, helping you keep in touch whenever you're in the air – no matter where you are.

Lighter, more compact, significantly less expensive, and simpler to install than conventional Satcom systems, the AIRSAT 1 system is the ideal communications choice for your aircraft.



### Data Services

Now the most affordable Satcom system in the air comes with data services as well. Honeywell's OneLink™ portfolio provides email and direct internet connectivity to you anywhere on the planet – at the same reasonable rates as voice. There's no excuse for not being in touch with your business opportunities while you're in the air! Data capability can be added to older systems or integrated into new systems.

### Direct Internet Connections

The fastest option, a direct internet connection provides you with data throughput around 10 kbps. The service is configured to access an internet portal at the Iridium switch rather than a dial-up modem at the gateway. Compression in the Iridium network speeds the data through the system.

### Dial-Up Data

Using the AIRSAT 1 as a data modem, a software driver runs on any Microsoft® Windows®-based operating system and supports the standard Windows® functions and applications. The data throughput for this connection is 2400 bps, and utilizes an RS-232 connection between the phone and your laptop.







## Telephone Services

Keep in touch from anywhere in the world. In the sky, you have all the phone capabilities to which you're accustomed: voice mail, call forwarding and worldwide messaging. Use convenient single-number paging. And all services are provided through Honeywell's OneLink portfolio with substantially lower airtime costs than traditional Satcom systems.



## Communicate From the Cockpit

The new AIRSAT 1 Aircraft Integration Unit (AIU) provides interfaces for satellite communication through an audio panel as well as multiple handset capability in the cabin. The AIU provides crew and passengers with maximum flexibility in using the AIRSAT system anywhere on the aircraft, and is especially useful in high-noise environments. Maintenance is simple with field programming capability via RS-232 and a WH-100 maintenance handset.

In the cockpit, the crew has access to make or receive calls on the AIRSAT system through a Telephone Dialer Unit (TDU) and their headsets. The TDU is a mounted dialer panel with a fully functional touchtone keypad. A hook button provides an on-/off-hook function, while its green LED flashes to indicate an incoming call and remains lit to indicate it is off-hook. Additional buttons make redials and volume adjustments simple and quick.

In the cabin, the AIU allows the use of multiple handsets and supports the most common analog phones, including two- and four-wire interfaces. The AIRSAT 1 also supports the use of a digital WH-100 handset and many types of wireless handsets.



## Continue Service Through Honeywell OneLink™

Honeywell's OneLink Communication Services offers reasonable pricing for exceptional service. Select from a range of service plans at competitive per-minute rates suited for every operating need and budget. Convenience comes from one phone number for both service and hardware support. All plans include voice mail, small message services, call forwarding and call barring at no additional charge. Pricing plans can be changed on request at any time. Contact Honeywell OneLink at any time toll-free at 877-436-2005, or internationally at 602-436-2005.

## Specifications

Frequency Range:	1616 - 1626.5 MHz
Temperature:	-20°C to +60°C
Operation:	Full Duplex
System Weight:	Under 19 lbs.

### Iridium Transceiver Unit (ITU-100):

Size:	3 MCU
Dimension:	12.52 in. L x 3.56 in. W x 7.64 in. H (Note: The Iridium Transceiver Unit can be placed vertically in an avionics rack, or horizontally for flange mounting.)
RF Output Impedance:	50 Ohms
RF Power Input:	6 Watts (max.)

### Antenna (ANT-100):

Type:	ARINC 761, omnidirectional above 8° elevation
Polarization:	Circular
Gain:	0dBic
Dimensions:	11.7 in. L x 3.5 in. W x 4.5 in. H

### Aircraft Integration Unit (AIU-100):

Size:	1/2 ATR Short
Dimensions:	7 in. L x 7 in. W x 4 in. H
Unit Weight:	Less than 4.2 lbs.
Power Requirement:	+18 VDC to +33 VDC
Temperature Range:	-20°C to +60°C

### Telephone Dialer Unit (TDU-100):

Dimensions:	4.3 in. L x 5.75 in. W x 1.13 in. H
Weight:	0.5 lb.
Power Requirement:	27.5 VDC nominal with reverse and over voltage protection
Current:	500 mA
Lighting:	10 mA
Microphone:	150 ohms amplified dynamic, or equivalent
Temperature:	-20°C to +55°C (operating)
Humidity:	>95%
Altitude:	50,000 ft.

# Honeywell

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