AVIATOR 300

Single Channel SwiftBroadband with Intermediate Gain Antenna

2013 Data Sheet

The most important thing we build is trust

Satcom for aircraft of any size and application

Connect your tablet or EFB with built-in WiFi access point

Simultaneous SwiftBroadband voice and data services

AVIATOR 300

Single Channel SwiftBroadband with Intermediate Gain Antenna

The AVIATOR 300 from Cobham is a compact, lightweight system that offers cost effective SwiftBroadband capabilities to the widest range of airframes flying today. Built with a full range of features and options, the AVIATOR 300 gives you the flexibility you need, no matter what your mission requires.

Low Cost Solution For Corporate, Air Transport, Military & Government Applications

The Cobham AVIATOR 300 delivers unprecedented versatility for virtually any application. With data up to 332 kbps, the system is a complete voice and data solution for Corporate, Military, Government & Special Missions applications that comes with a range of embedded features such as:

- Inmarsat SwiftBroadband channel for simultaneous data and voice
- Extremely compact and lightweight
- Up to 8 simultaneous voice calls
- Email with attachments
- Internet access
- Fax capable
- Smartphone and tablet connectivity
- Built-in router for intelligent connectivity support and multiple user support
- Built-in ethernet switch for supporting numerous wired laptops and/or EFBs
- Built-in wireless access point option for supporting numerous wireless laptops, smartphones and/or tablets
- Built-in PBX for supporting numerous handsets and in-flight calls
- ARINC 741/781 antenna compatibility
- ISDN connectivity (down to 45 degrees elevation)
- Supports all current standards for secure voice and data transmission (FNBDT, STE, STU, HAIPE, etc.)

Intermediate Gain Antenna (IGA)

To comply with installations on smaller aircraft, the AVIATOR 300 system uses an IGA antenna. This ensures a lightweight package with low profile/drag and small antenna footprint on the fuselage, typically less than one-third that of a high gain antenna, making it suitable for use on light aircrafts. The IGA installation provides full SwiftBroadband capabilities with data speeds up to 332 kbps. For more information on antenna options available, please contact your Cobham SATCOM sales representative.

Navigational Reference System (NRS)

The AVIATOR 300 system has self steering capabilities when used with an antenna that incorporates the NRS functions, such as the TT-5006A. For more information on this feature please contact your Cobham SATCOM sales representative.

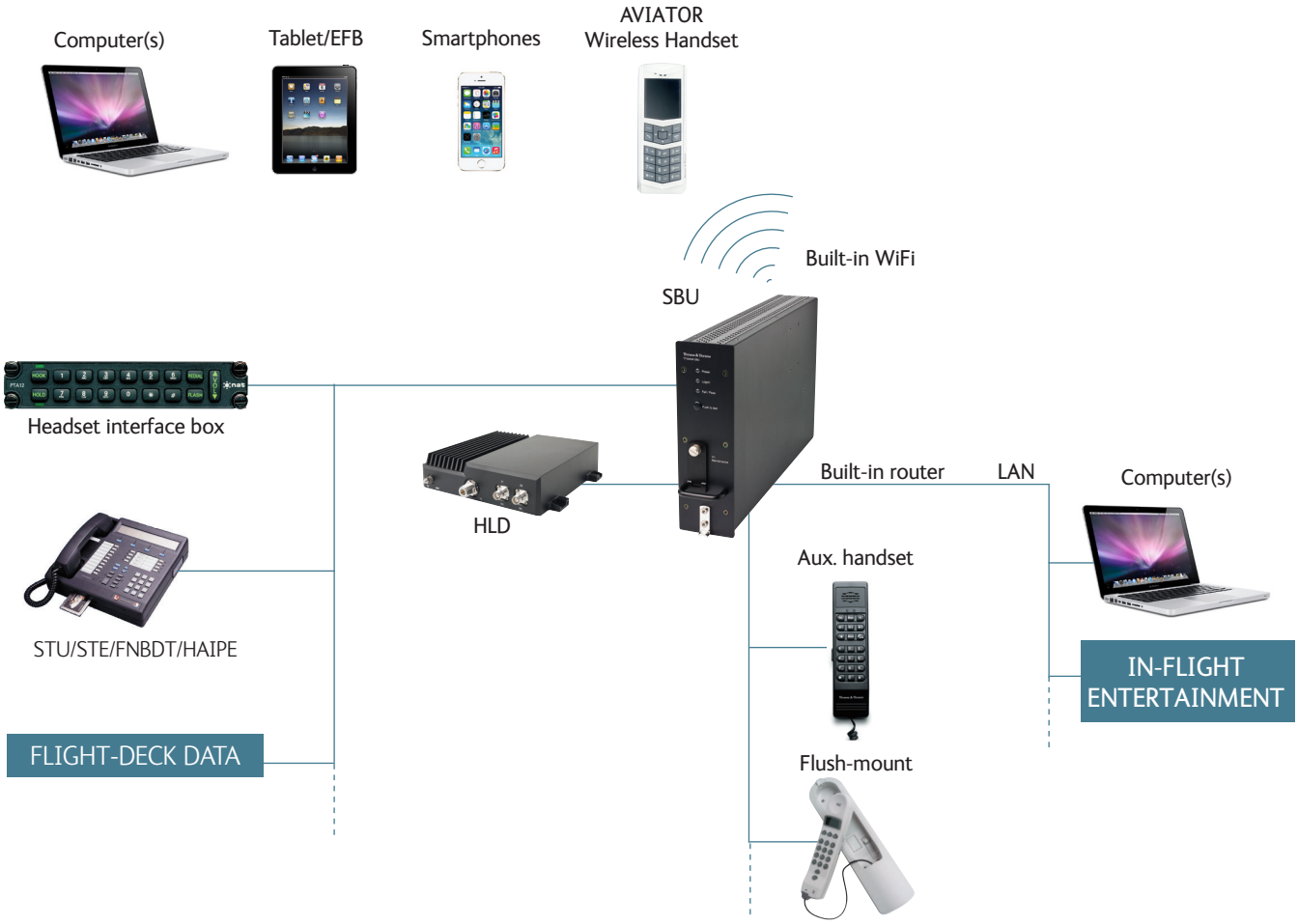
Upgrade from Aero-M and Aero-I

The AVIATOR 300 is the perfect upgrade path for legacy Aero-M and Aero-I installations. When upgrading these systems to AVIATOR 300, the TT-5006A or IGA-5001 antenna installation can be reused, making the upgrade simple and cost effective. For more information on how to get AVIATOR 300 onboard, please contact your Cobham SATCOM sales representative.

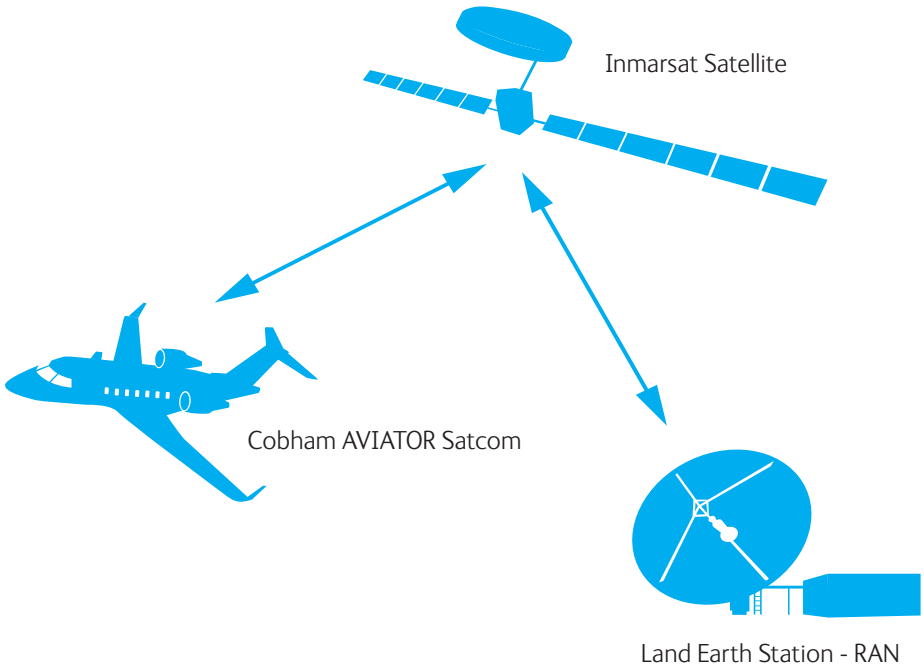
Strong Foundation Means More Possibilities

The core unit of Cobham's SwiftBroadband systems, the SwiftBroadband Unit (SBU), has an optional built-in wireless access point for easy connection of laptops, Smartphones, Tablets or VoIP handsets. The optional built-in router makes it easy to connect up to 6 laptops and the ISDN interface can be connected to phones, routers, PCs or secure devices. Two 2-wire interfaces enables the connection of standard or wireless handsets, fax machines, headset interface boxes etc.

The detachable configuration modules contain all settings making it very easy to replace the combined High power amplifier, Low noise amplifier and Diplexer (HLD) or SwiftBroadband Unit (SBU). ARINC 741/781 compatibility ensures a straightforward interface to an Intermediate Gain (IGA) antenna.



Cobham SATCOM has developed both the satcom systems as well as the network ground infrastructure.



Global Voice and Data with Inmarsat SwiftBroadband

SwiftBroadband is Inmarsat's latest satellite network with global coverage providing both voice and broadband data. It is the world's leading commercial mobile broadband satellite service.

With three satellites placed in geostationary orbit 36,000 kilometers (22,000 miles) above the Atlantic, Indian and Pacific Oceans respectively, they facilitate a reliable global coverage.

Combined with AVIATOR terminals this solution offers high quality voice and data connectivity with the functionality of traditional terrestrial networks.

SwiftBroadband (IGA)

The Cobham AVIATOR 300 system is engineered from the ground up to take advantage of the latest communication technologies like SwiftBroadband for increased reliability and connectivity. The SwiftBroadband Background Data and SwiftBroadband Low Cost Voice channel allow users to access a shared data channel and a compressed high quality voice channel at the same time.

The AVIATOR 300 is an Inmarsat SwiftBroadband IGA (Class 7) system supporting:

- Single channel SwiftBroadband
- Up to 8 simultaneous voice calls
- Background IP data up to 332 kbps
- Streaming IP at 8/16/32/64 kbps
- ISDN service or 3.1 KHz audio down to 45 degrees elevation

SwiftBroadband Unit (SBU)

Features

- Up to 8 simultaneous voice calls
- IP Packet or streaming SwiftBroadband data
- Ethernet connectivity
- Built-in router with six ethernet interfaces
- Built-in wireless access point
- Low weight and power consumption
- Compact 2 MCU size
- No forced cooling required
- Easy integration
- FAA PMA

Specifications

Part Number	405040A
Dimensions	
Total L / W / H	320.5 / 193.5 / 57.2 mm
	12.62 / 7.62 / 2.25 in
Mass	2.8 kg / 6.2 lbs
Power	28 V DC, 30 W typ.
	Max 83 W
Altitude	MSL to 55,000 ft
Temperature	-25 C to +55 C
Connectors	
Rear	ARINC 404A
Front	RJ-45

Environmental Qualification

DO-160E

[(A1)(F1)X]CAB[SB2M]ExxxxxZ[AB]A[RB][ZC][RR]M[A3J33]XXAX

High Power Amplifier, Low Noise Amplifier and Diplexer (HLD)

Features

- Small size and low weight
- Powered through SBU - no power wires to HLD required
- No forced cooling required
- FAA PMA

Specifications

Part Number	405016A
Dimensions	
Total L / W / H	228 / 200 / 50 mm
	8.98 / 7.87 / 1.97 in
Mass	2.6 kg / 5.7 lbs
Power	Powered through SBU
Altitude	MSL to 55,000 ft
Temperature	-55 C to +70 C

Environmental Qualification

DO-160E

[(A2)(F2)X]BBB[SCL]E[(Y)(W)]XXFXZXXX[ZC][RR]M[A3J33]XXAX

Configuration Module (CM)

Features

- Stores system configuration parameters
- Located at the rear of the SBU
- Contains the SIM card
- Configured through SBU web interface
- Contains phone book
- CM may be removed or inserted for easy SBU exchange
- FAA PMA

Specifications

Part Number	405040A-001
Dimensions	
Total L / W / H	47 / 45.5 / 20 mm
	1.85 / 1.79 / 0.79 in
Mass	0.07 kg / 0.15 lbs
Altitude	MSL to 55,000 ft
Temperature	-25 C to +55 C

Environmental Qualification

DO-160E

[(A1)(F1)X]CAB[SB2M]ExxxxxZ[AB]A[RB][ZC][RR]M[A3J33]XXAX

AVIATOR 300 Key (IGA)

Software key allowing system use with an Intermediate Gain Antenna (IGA)

Part Number	405040A-007

The most important thing we build is trust

Cobham SATCOM - The Powerhouse of Airborne Satcom

Cobham SATCOM is the largest manufacturer of Inmarsat antennas, terminals and land earth station RAN (Radio Access Network) equipment. Cobham SATCOM uses state-of-the-art technologies to design affordable, reliable and high performance satellite communication systems.

Cobham SATCOM

- Has a global footprint with offices in USA, Europe, Africa and Asia
- Has 20 years of experience developing satellite communication technology for the aviation industry, for cockpit, aircraft operational and cabin services
- Has more than 3500 Aeronautical systems delivered and installed (+80.000 BGAN Terminals)
- Supplies terminals for land, maritime and aeronautical markets and also the network and ground stations for mobile satellite services
- Designs the full technology stack from modulation to radio core technology
- Cobham SATCOM has developed both the satcom systems as well as the network ground infrastructure

For further information please contact Cobham SATCOM Aero:

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