AVIATOR 350

Single Channel SwiftBroadband with High Gain Antenna

2013 Data Sheet

The most important thing we build is trust

COBHAM

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 350

Single Channel SwiftBroadband with High Gain Antenna

Small in size but big on performance and features, the **Cobham AVIATOR 350 is an Inmarsat SwiftBroadband Satcom solution like no other.**

Enhanced Capability, Full Functionality

The Cobham AVIATOR 350 is a complete communications solution that brings all the functionality you need for a wide range of applications such as corporate, air transport, government, military or special missions use. AVIATOR 350 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

- Internet access

- Email with full attachments

- Fax capable

- Smartphone and tablet connectivity

- Built-in router option 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 (optional) for supporting numerous wireless laptops, tablets and/or smartphones

- Built-in PBX for supporting numerous handsets and in-plane calls

- ARINC 741/781 antenna compatibility

- ISDN connectivity

- Supports all current standards for secure voice and data transmission (FNBDT, STE, STU, HAIPE, etc.)

High Gain Antenna (HGA)

For users requiring the highest performance from their SwiftBroadband service, the AVIATOR 350 system utilizes a High Gain Antenna (HGA) providing data rates up to 432 kbps. For more information on antenna options available, please contact your Cobham sales representative.
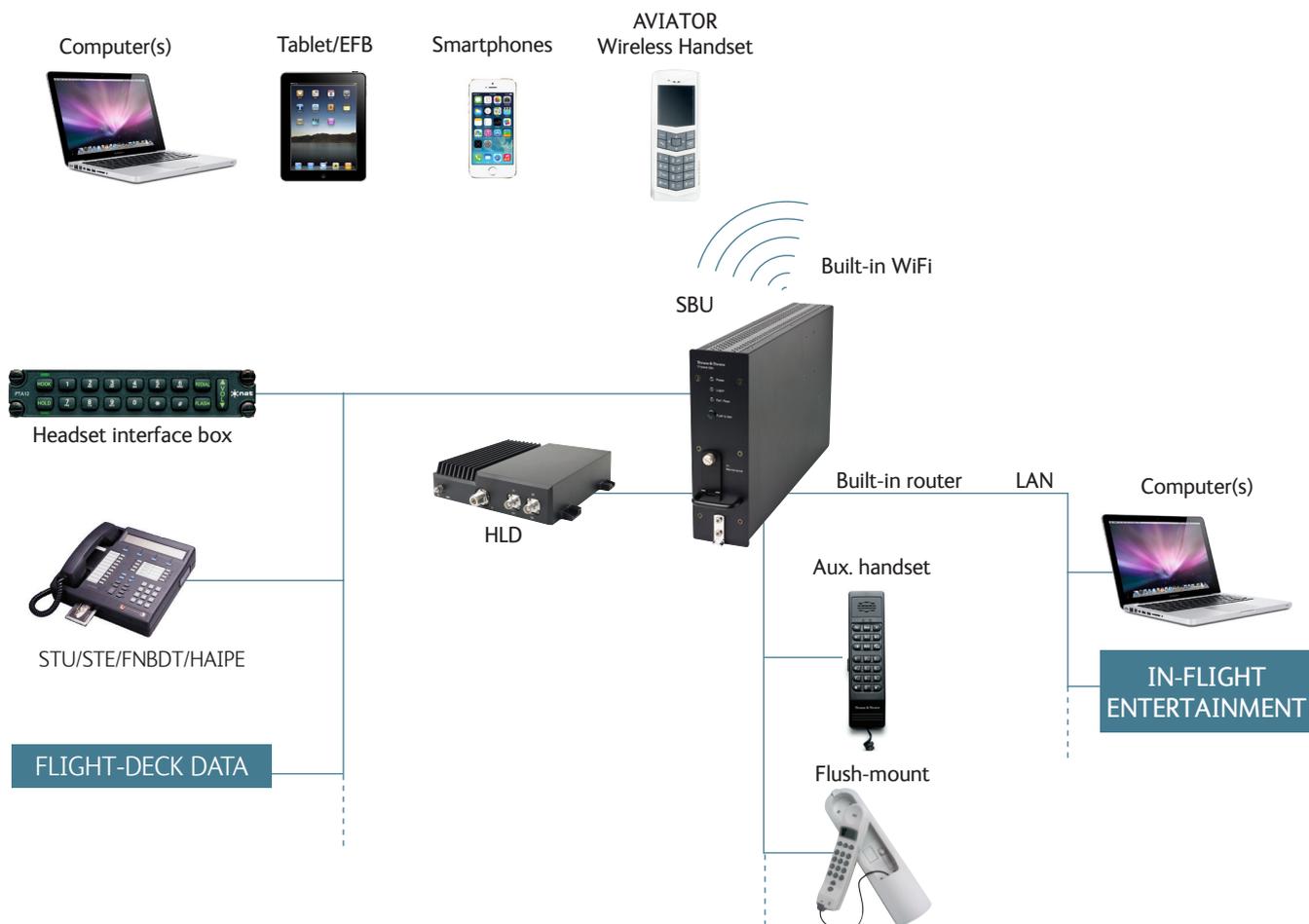
SB X-Stream Service

The Inmarsat SB X-Stream service provides streaming data at rates above 256Kbps, enabling higher quality of service and more data to be streamed at a faster rate. SB X-Stream supports a wide-range of applications requiring a steady data flow including video streaming and inputs from various sensors.   For more information please contact your Cobham sales representative.
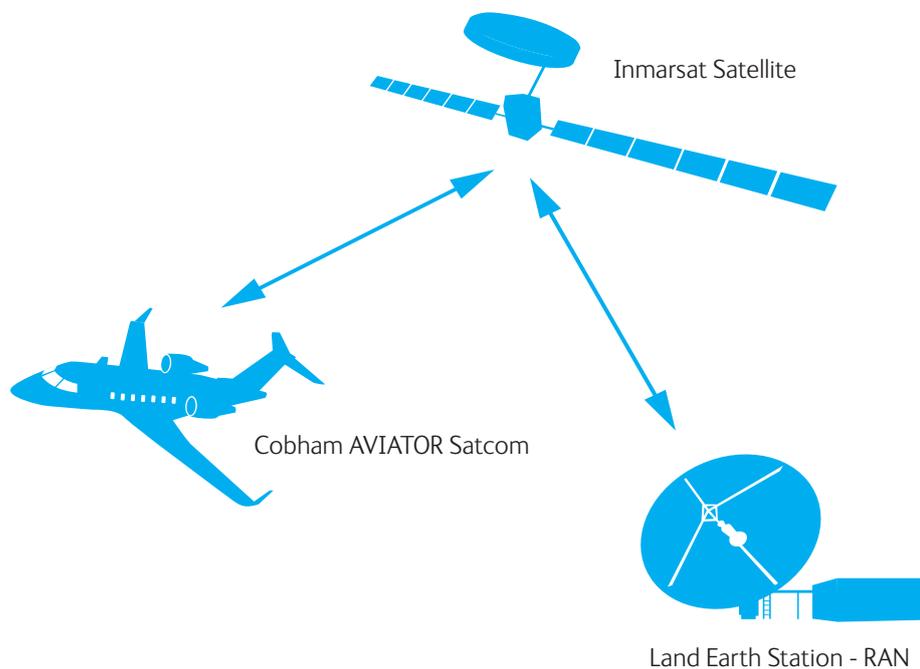
Strong Foundation Means More Possibilities

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 enable 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 many High Gain Antennas (HGA).

Computer(s) Tablet/EFB Smartphones AVIATOR Wireless Handset

Built-in WiFi

SBU

Headset interface box

HLD

Built-in router   LAN   Computer(s)

Aux. handset

STU/STE/FNBDT/HAIPE

IN-FLIGHT ENTERTAINMENT

FLIGHT-DECK DATA

Flush-mount

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

Inmarsat Satellite

Cobham AVIATOR Satcom

Land Earth Station - RAN

Global Coverage 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 (HGA)

The Cobham AVIATOR 350 system is engineered to take advantage of the latest communication technologies like SwiftBroadband for increased functionality, 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 350 is an Inmarsat SwiftBroadband HGA (Class 6) System supporting:

- Single Channel SwiftBroadband
- Circuit-switched standard voice
- Background IP up to 432 kbps
- Streaming IP at 8/16/32/64/128 kbps
- SB X-Stream services
- ISDN service or 3.1 kHz audio

SwiftBroadband Unit (SBU)

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

Configuration Module (CM)

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

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

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 350 Key (HGA)

Software key allowing system use with a High Gain Antenna (HGA)

Part Number	405040A-006

COBHAM

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

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