

# AVIATOR 700D

Cockpit and Cabin Connectivity

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 700D

## Cockpit and Cabin Connectivity



### A Complete Solution For Multiple Applications

Now access to the Inmarsat Aero H+ and SwiftBroadband services are available in one powerful, integrated system. Designed for multiple application flexibility, the AVIATOR 700D is engineered for use in business, VIP, air transport, government and military aircraft platforms. From cockpit to cabin, the AVIATOR 700D delivers the features and functionality you need in a package no more than 8 MCU.

### Cabin Services - SwiftBroadband

- SwiftBroadband channel for simultaneous data and voice
- Up to 8 simultaneous voice calls
- Wired and wireless web browsing and corporate VPN access
- Wireless use of smartphones and tablets for email services
- Built-in router and ethernet switch for intelligent connectivity support and multiple user support
- Built-in wireless access point option for supporting numerous wireless laptops, smartphones EFBs and/or tablets
- Built-in PBX for supporting numerous handsets and in-flight calls
- ISDN connectivity

### Cockpit Services

Cobham's AVIATOR 700D seamlessly brings critical safety, navigational and performance data directly into the cockpit, reducing pilot workload, increasing efficiency and overall operational safety.

- Inmarsat H+ services
- MCDU and cockpit audio interface
- 2 voice channels
- Cockpit data channel
- AFIS/ACARS
- Flight-deck data link
- FANS/CPDLC ready

### Swift64 (for fallback)

The Inmarsat Swift64 service offers fast data transmission. It provides both the high quality and speed of a full ISDN service and the cost effective flexibility of a full IP service (MPDS). For VIP, corporate and government users, this combination offers unmatched access to modern communications. The Swift64 channels of the Aero-HSD+ works equally well with both. ISDN traffic is charged by the length of time the user remains on-line, whereas MPDS charges are per megabit.

### High Gain Antenna (HGA)

For users requiring the highest performance from their SwiftBroadband service, the AVIATOR 700D system utilizes an HGA antenna providing data rates up to 432 kbps. For more information on antenna options available, please contact your Cobham sales representative.

### SB X-Stream Service

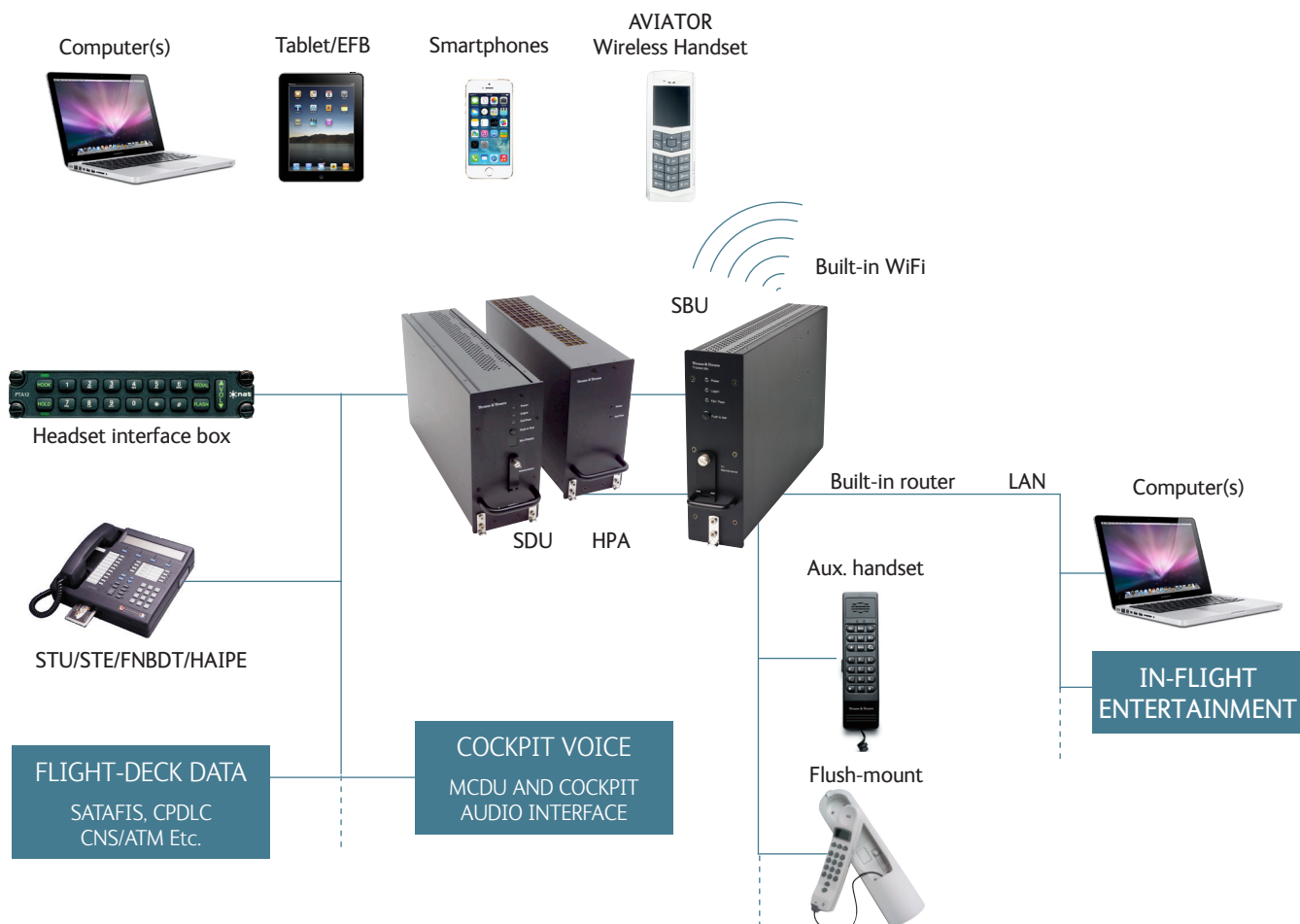
The Inmarsat SB X-Stream service provides streaming data at rates above 256Kbps, enabling higher quality of service and more data to be streamed at a faster rate. SB X-Stream supports a wide-range of applications requiring a steady data flow including video streaming and inputs from various sensors.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



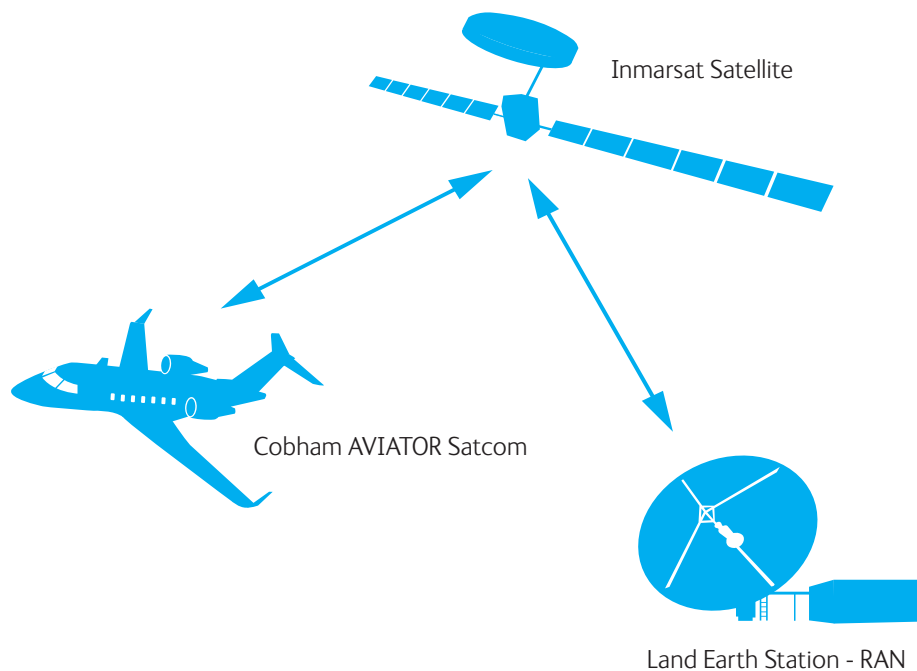
## Strong Foundation Means More Possibilities

The Satellite Data Unit serves the cockpit with safety data and voice services including two 2-wire connections for connecting fax machines, headset interface boxes etc. Ethernet, ISDN and Serial Interfaces secure easy connections directly to laptop PC's or a router/server. The SwiftBroadband Unit serves both the cockpit and cabin with voice and data services and has a built-in wireless access point for easy connection of laptops, Smartphones or VoIP handsets.

The detachable configuration modules contain all settings making it very easy to replace the satellite data unit (SDU) or SwiftBroadband Unit (SBU). ARINC 741/781 compatibility ensures a straightforward interface to all current high gain antennas.



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



### Global Coverage with Inmarsat H+ and SwiftBroadband Services

Inmarsat's latest satellite network, the I4 satellites provide 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 700D system is engineered to take advantage of the latest technologies like SwiftBroadband for increased reliability and connectivity. The SwiftBroadband Background Data and Standard Voice channel allows users to access a shared data channel and a compressed high quality voice channel at the same time.

The AVIATOR 700D 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)



Satellite Data Unit (SDU)



High Power Amplifier (HPA)

### 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

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

- Seamless integration of Aero-H+ and Swift64 services into one unit
- No forced cooling required
- Built-in CTU connects up to six (standard or wireless) handsets incl. two 2-wire (RJ-11/POTS) interfaces - no converter box required. Detachable Configuration Module (CM)
- Built-In Test Equipment (BITE)
- ARINC 429 for IRS, AHRS, ACARS, MCDU, CMU, AFIS, CPDF
- RS-232C port for Portable Data
- Loader/Configuration Management Terminal (PDL/CMT)
- Ethernet connectivity
- ISDN connectivity
- RS422 connectivity
- FAA PMA

### Specifications

<b>Part Number</b>	405035A-THD
<b>Dimensions</b>	
Total L / W / H	320.5 / 90.4 / 193.5 mm 12.62 / 3.56 / 7.62 in
<b>Mass</b>	3.5 kg / 7.2 lbs
<b>Power (max.)</b>	28 V DC, 30 W typ. 50 W (incl. handsets and DLNA)
<b>Altitude</b>	MSL to 55,000 ft
<b>Temperature</b>	-25 C to +55 C
<b>Connectors</b>	
Rear	ARINC 404A
Front	SUB-D 15 Female

### Environmental Qualification

DO-160D  
[(A1)(F1)X]CAB[(S2B2)(SM)]ExxxxxZ[A()B]A[A()B]Z[RR]M[A3E3]XXA

### Features

- Small size (3 MCU) and low weight
- No external forced cooling required
- Installation outside pressure area
- FAA PMA

### Specifications

<b>Part Number</b>	405014A-THD
<b>Dimensions</b>	
Total L / W / H	320.5 / 93 / 193.5 mm 12.62 / 3.66 / 7.79 in
<b>Mass</b>	5.1 kg / 11.2 lbs
<b>Altitude</b>	MSL to 55,000 ft
<b>Temperature</b>	-55 C to +70 C
<b>Connectors</b>	
Rear	ARINC 404A

### Environmental Qualification

DO-160E  
[(A2)(F2)Z]BBB[SCL]ExxxxxZ[A()B]A[A()B]Z[RRM[A3E3]XXA

### AVIATOR 700D Key (HGA)

Software key allowing system use with a High Gain Antenna

**Part Number** 405040A-005



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## 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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