Thrane & Thrane

AVIATOR 350

More Bandwidth - SwiftBroadband With More Possibilities



Small in size but big on performance and features, the Thrane & Thrane AVIATOR 350 is a Satcom solution like no other.

Enhanced Functionality For Corporate, Government & Military Applications

The AVIATOR 350 is a complete Satcom solution for virtually any application, including business jet, government, military and special missions. Delivering increased bandwidth with speeds up to 432 kbps, the AVIATOR 350 delivers quality voice and data services. The AVIATOR 350 allows the use of enhanced features like Inmarsat's SB X-Stream service through a High Gain Antenna (HGA). Other embedded features of the system include:

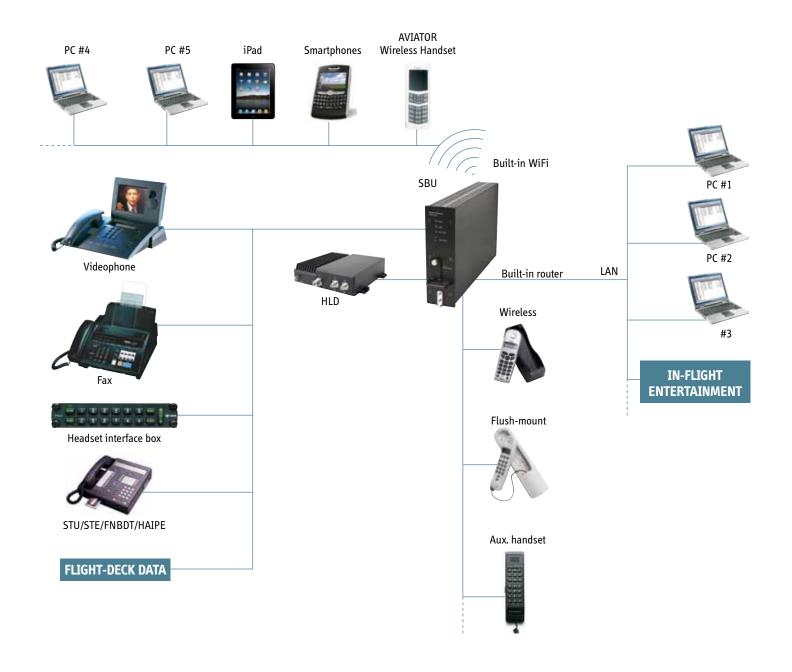
- SwiftBroadband channel for simultaneous data and voice
- Extremely compact and lightweight
- VoIP connectivity
- Internet access
- Email with full attachments

- Fax capable
- Smartphone 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 option for supporting numerous wireless laptops 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.)

The AVIATOR 350 system has many interfaces and possibilities

The core unit of Thrane & Thrane's SwiftBroadband systems, the SwiftBroadband Unit (SBU), has an optional built-in wireless access point for easy connection of laptops, Smartphones 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 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 (HGA) antennas.



AVIATOR 350



Enhanced Capability, Full Functionality

The Thrane & Thrane AVIATOR 350 is a complete cabin solution that brings all the functionality you need for a wide range of applications such as corporate, government, military or special missions use. Stay connected with the full scope of services including internet access, e-mail, VPN, fax and telephony. Other features include:

- Built-in PBX
- Built-in Router (Optional)
- Built-in Ethernet switch
- Built-in WiFi access point (Optional)

Inmarsat Aeronautical Satellite Communications Services

Inmarsat is a global satellite communications company operating geostationary satellites to provide the most versatile and reliable satellite network in the world.

SwiftBroadband

The Thrane & Thrane 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 Class 6 System that supports:

- 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

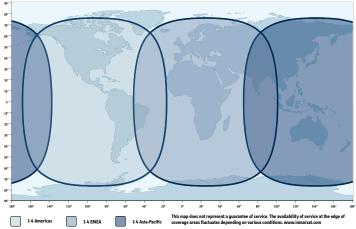
High Gain Antenna (HGA)

For users requiring the highest performance from their SwiftBroadband service, the AVIATOR 350 system utilizes an HGA antenna providing data rates up to 432 kbps. For more information on antenna options available, please contact your Thrane & Thrane 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, supporting a wide-range of applications within business, military and government sectors. For more information please contact your Thrane & Thrane sales representative.

I-4 Satellite Coverage





TT-5040A SwiftBroadband Unit (SBU)

Features

- IP packet or streaming SwiftBroadband data.
- Ethernet connectivity
- ISDN 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

Characteristics

TT-5040A SBU	
Dimensions:	
$(L \times W \times H)$:	12.62" x 7.62" x 2.25"
	(320.5 mm x 193.5 mm x 57.2 mm)
Mass:	6.2 lbs (2.8 kg)
Power:	28 V DC, 30 W typ. 106 W max.
Connectors:	Rear: ARINC 404A
Front:	R]-45
Environmental:	Temperature: -25°C to +55°C
	Altitude: MSL to 55,000 ft
DO-160E string:	[(A1)(F1)X]CAB[SB2M]ExxxxxZ[AB]
	A[RB][ZC][RR]M[A3]33]XXAX



TT-5016A High Power Amplifier, Low Noise Amplifier and Diplexer (HLD)

Features

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

Characteristics

TT-5016A HLD	
Dimensions:	8.98" x 7.87" x 1.97"
(L x W x H):	(228.0 mm x 200.0 mm x 50.0 mm)
Mass:	5.7 lbs (2.6 kg)
Environmental:	Temperature: -55 °C to + 70 °C
	Altitude: MSL to 55,000 ft
DO-160E string:	[(A2)(F2)X]BBB[SCL]E[(Y)(W)]
-	XXFXZXXX[ZC][RR]M[A3]33]XXAX
Power:	Powered through SBU

TT-5040A-001 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/inserted for easy SBU exchange

Characteristics

TT-5040A-001 CM		
Dimensions:	1.85" x 1.79" x 0.79"	
$(L \times W \times H)$:	(47.0 mm x 45.5 mm x 20.0 mm)	
Mass:	0.15 lb (70 g)	
Environmental:	Temperature: -25°C to +55°C	
	Altitude: MSL to 55,000 ft	
DO-160E string:	[(A1)(F1)X]CAB[SB2M]ExxxxxZ[AB] A[RB][ZC][RR]M[A3]33]XXAX	

TT-5040A-006 AVIATOR 350 Key (HGA)

Features:

• Software key allowing system use with High Gain Antenna

Characteristics

PN: 405040A-006



TT-5040A-004 Wireless Antenna

Features

- Meet and exceed the requirements of IEEE 802.11a/b/g
- Multi-band antenna (802.11a/b/g)
- Low profile housing
- •TNC Connector

Characteristics

TT-5040A-004 Wireless Antenna		
	Dimensions:	4.7" x 0.48" x 0.5"
	$(L \times W \times H)$:	(119.4 mm x 12.2 mm x 12.7 mm)
	Mass:	.063 lbs (28 g)
	DO-160D string:	[(A1)X]CAB[(SC)(RC1)]
		XWXXXXC[AE]AZCTM[XXE1]XXA

TT-5624B AVIATOR Wireless Handset

Features

- Handset with large color display
- Access to basic configuration and system status
- Noise cancellation
- Speaker for hands-free operation
- Headset jack

Characteristics

TT-5624B AVIATOR Wireless Handset		
Dimensions:	6.10" x 2.17" x 1.04"	
$(L \times W \times H)$:	(152.0 mm x 55.0 mm x 26.5 mm)	
Mass:	0.39 lbs (175 g)	
DO-160F string:	[A4X]CXB[SB2M]XXXXXXA[(AX)	
	(BX)]A[RB][ZC][RS]M[XXXXX]	
	[XXXX]XAX	
Environmental·	Temperature: -15 °C to +45 °C	

Environmental: Temperature: -15 °C to +45 °C

TT-5626B

AVIATOR Wireless Handset Cradle

Features

Charges AVIATOR Wireless Handset

• 28 VDC

Characteristics

TT-5626A AVIATOR Wireless Handset Cradle		
Dimensions:	6.97" x 2.73" x 2.13"	
(L x W x H):	(177.0 mm x 60.3 mm x 54.0 mm)	
Mass:	0.33 lbs (150 g)	
DO-160F string:	[A4X]CXB[SB2M]XXXXXA[(AX)	
-	(BX)]A[RB][ZC][RS]M[XXXXX]	
	[XXXX]XAX	
Environmental:	Temperature: -15 °C to +45 °C	

TT-5621B/TT-5622B Aux. Handset and Cradle

Features

- Auxiliary handset and cradle
- 600 Ohm ETSI TBR 21 interface
- Adjustable ringer
- 10 memory locations (speed dial)
- Available in black or white

Characteristics

TT-5621B Handset		
	Dimensions:	7.87" x 2.05" x 1.24"
	$(L \times W \times H)$:	(200 mm x 52 mm x 31.5 mm)
	Mass:	0.49 lbs (220 g)

TT-5622B Cradle

Dimensions:	6.3" x 2.4" x 1.12"
$(L \times W \times H)$:	(160.5 mm x 61.0 mm x 28.4 mm)
Mass:	0.43 lbs (200 g)
DO-160D String:	[A1X]CAB[(SMB2)(SM)(UFF1)]
	XXXXXXAXXXB[RR]M[A2E3]XXA

THRANE & THRANE – THE BROADBAND EXPERTS

Thrane & Thrane is the world's leading manufacturer of equipment and systems for global mobile radio and satellite communication. Since its incorporation in 1981, the company has established a strong position within global mobile communication based on the Inmarsat system and today, Thrane & Thrane provides equipment for use in the air, at sea and on land.

Following years of experience of BGAN terminal development, Thrane & Thrane possesses key knowledge and technological understanding which is applied within aeronautical, maritime and land mobile segments. Having delivered the ground infrastructure (the Radio Access Network) for the I-4 satellites to run Inmarsat's BGAN services, Thrane & Thrane was also contracted to further develop the ground infrastructure for aeronautical, maritime and land vehicular services.

With an extensive history of providing satellite communication terminals to business, commercial and military aviation markets, Thrane & Thrane is well-positioned to develop solutions which fully harness the power of Inmarsat SwiftBroadband. Today, Thrane & Thrane offers a comprehensive SwiftBroadband portfolio under the AVIATOR brand, providing a solution to satisfy any aircraft requirement for size, specification or application.

Thrane & Thrane is the only aeronautical communications terminal supplier to deliver both aeronautical terminals and the ground infrastructure they operate on.

