

AERO-SB+

THE COMPLETE SATCOM SOLUTION – FROM COCKPIT TO CABIN



VOICE,
DATA,
COCKPIT.



Thrane & Thrane

FULL COCKPIT & CABIN CAPABILITY – COMPACT & LIGHTWEIGHT COMPONENTS



For more than a decade, Thrane & Thrane has been pioneering aeronautical satellite communications (SATCOM) solutions based on the Inmarsat system. Thrane & Thrane is dedicated to developing the lightest and most versatile cabin broadband and satellite communications systems available to aviation today. By combining “office in the sky” services and critical cockpit safety and data functions, Thrane & Thrane’s AERO-SB+ provides operators a complete SATCOM solution which can be tailored to their airframe, mission profile and budget. A true multi-channel solution, AERO-SB+ integrates Inmarsat Aero-H+ and SwiftBroadband services into one lightweight, compact and full featured system.

COCKPIT: Safety and operational regulations and procedures for aircraft flying over land and over sea are constantly evolving. Thrane & Thrane’s AERO-SB+ seamlessly brings this critical safety, navigational and performance data directly into the cockpit, reducing pilot workload, increasing efficiency and overall operational safety. Among the services are: OCL (Ocean Clearance), PDC (Pre-Departure Clearance) and D-ATIS (digital-Automatic Terminal Information Service). AERO-SB+ is also ready for future CNS/ATM applications.

CABIN: AERO-SB+ gives operators the capability they demand with regard to “office in the sky” cabin features. The system provides up to four channels of simultaneous voice and data, at speeds up to 432kbps. This means the ability to access a true IP based network in flight with Inmarsat’s I-4 Satellite Constellation facilitating global voice and data calls. With Aero-SB+ users can make phone calls, connect their PDA, log on to corporate networks, e-mail, surf the internet or send a fax all while in flight.

Aero SB+ offers a wide range of innovative features such as a built in PBX and (Router and WIFI access point options. Additionally, Aero-SB+ can significantly reduce airtime cost by paying only for bandwidth used instead of paying for the connection time (as was the case with Inmarsat’s previous generation Swift 64 service).

FLEXIBLE MODES OF OPERATION

AERO-SB+ can operate in different data modes depending on the users requirements. You can choose Quality of Service (QoS), which ensures guaranteed bandwidth in step and you pay per minute. Or opt for the always-on background connection where you only pay for the amount of data you transfer.

Connect your Laptop, cell phone, PDA and more via WiFi and get instant wireless access to the www at broadband speed along with high quality VoIP – in the air.



AERO-SB+ FEATURES & BENEFITS

Cockpit Services

- Cockpit voice dialing from MCDU
- Cockpit data channel
- Interface to ACARS etc

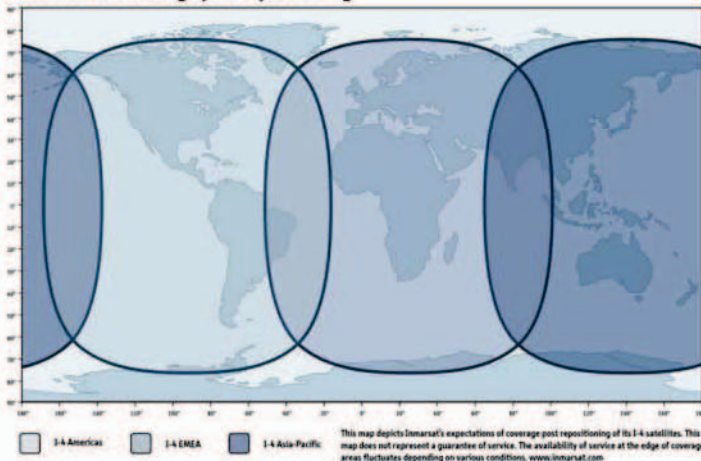
Cabin Services

- Data rates up to 432 kbps
- VoIP connectivity
- Wired and wireless web browsing and corporate VPN access
- Wireless use of PDA and Smartphones for email and SMS service
- Low cost, high quality voice service
- Built-in router – for intelligent connectivity support and multiple user support
- Built-in Ethernet switch – for supporting multiple wired laptops
- Built-in wireless LAN – for supporting multiple wireless devices
- Built-in PBX – for supporting multiple handsets
- ISDN connectivity

To learn how you can make your time in the air more productive with AERO-SB+ or any of the other complete cabin communications systems from Thrane & Thrane, visit www.thrane.com or call your sales representative at +1.757.463.9557 or +4539.55.88.00.

Inmarsat Generation 4

I-4 satellite coverage post repositioning



The Aero-SB+ is based on the fourth generation of Inmarsat satellites and is now available globally, with the exception of the extreme Polar Regions.

AERO-SB+ : Full Featured, Functional And Flexible



- Data rates up to 432 kbps
- Always on – low cost data
- High quality, low cost voice
- Built-in router
- Compact & Lightweight
- Wireless functionality
- Global cockpit data channel

Innovation In Communication - From Cockpit To Cabin



World Wide Web - Surf the internet as you would at the office or home.



E-mail - Reading e-mail and downloading attachments is swift and easy.



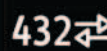
Phone - Make quality phone calls at a low cost using either wired or wireless handsets.



Fax - Send and receive faxes.



Corporate LAN - Log-on to your corporate network from anywhere in the world.



Data - With rates up to 432 kbps, use your laptop or WiFi handheld device to stay connected.



Cockpit - Flight Deck Services

THRANE & THRANE – THE BROADBAND EXPERTS

Thrane & Thrane is the world's leading manufacturer of terminals and land earth stations for global mobile satellite communications and has delivered close to 400,000 terminals to the land mobile, maritime and aeronautical markets.

After years of BGAN terminal development, Thrane & Thrane possesses the key technology that will be reused in the 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 mobile services.

Thrane & Thrane today provides the entire ground infrastructure for all aeronautical services, such as the classic aeronautical services (H, H+, I and M) as well as the Swift64 and SwiftBroadband services.

We truly are the only aeronautical supplier to deliver both the aeronautical terminals and the ground infrastructure they operate on.