Swift 64

inmarsat

◉ Swift 64 provides ISDN, Mobile Packet Data Service (MPDS) and a high quality voice service.

ISDN and packet-data

Swift 64 is a circuit-switched, mobile ISDN service providing the same high quality and guaranteed speed as terrestrial ISDN. Higher bandwidth can be achieved by bonding up to four 64kbps channels together.

Swift 64 also offers a Mobile Packet Data Service (MPDS), which provides the economy and flexibility of 'always-on' packet data connections.

In addition, it provides a high quality voice service with the same functionality as land-based fixed phone services.

The end-user experience depends on the native performance of Swift 64, as well as any performance-enhancing technologies that are being used eg. data compression, IP and application optimisation.

Features

The Swift 64 service has the following features:

- Dedicated circuit-mode (mobile ISDN), packet-mode (MPDS) connections or high quality voice channels

- One, two or four-channel avionics

- 64kbps data throughput per ISDN channel

- Optional bonding of channels to yield up to 256kbps – can be increased further through data compression

- Three data formats: ISDN, Unrestricted Digital Information (UDI) and packet-data (TCP/IP)

- Standalone or simultaneous operation with Inmarsat Aero H/H+ through the same high-gain antenna

- Support for high-assurance applications, including NATO secret and NSA Type-1 encryption systems providing remote mobile access to classified networks – STU-III/IIb, STE, KIV-7, Brent and HAIPE devices including KG-175 TACLANE, KG-235 Sectéra, KG-250 Altasec, subject to verification testing

Requirements

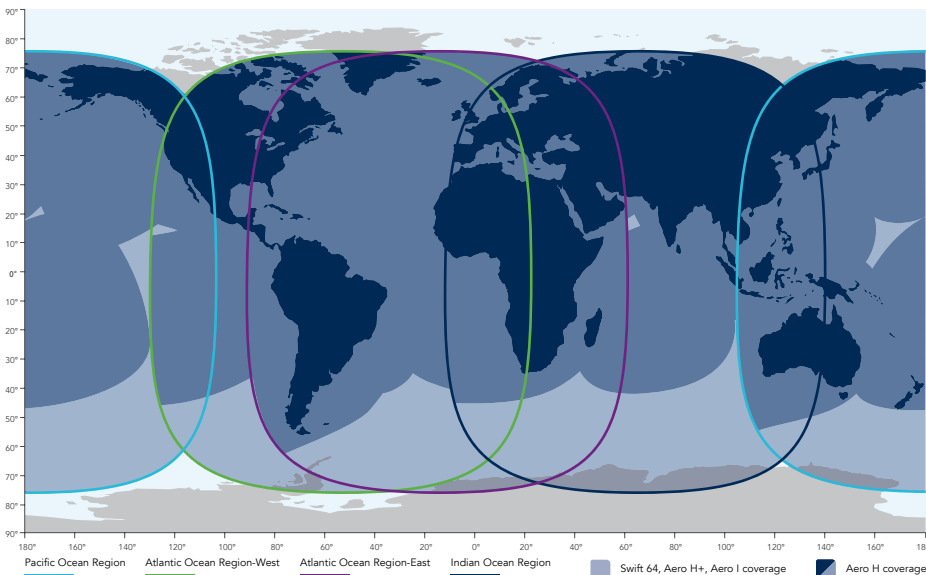The following is required to operate Swift 64:

- Swift 64 avionics – the satellite modem to access the service
- A high-gain aircraft antenna capable of receiving Swift 64 and related equipment eg. Diplexer, LNA, HPA and cabling
- An agreement with a service provider

Aircraft without an Inmarsat system

For new aircraft, airframe manufacturers can advise if Swift 64 avionics are an option either as SFE or BFE. For aircraft already in use, Swift 64 avionics manufacturers can recommend equipment and advise on STC status.

Upgrading an existing Inmarsat installation

Users of Inmarsat classic services, such as Aero H/H+, can add Swift 64 to their installation depending on the equipment already installed on the aircraft.

Consultation with the relevant avionics and antenna manufacturers is necessary to establish the appropriate upgrade path for each particular aircraft configuration.

Applications

Swift 64 supports a wide range of crew and passenger applications:

Crew

- Voice communications
- Electronic Flight Bag (EFB), flight plan, weather and chart updates
- General operational planning
- Crew reporting and general administration

Passengers

- Telephony: in-seat, mobile, VoIP and text messaging
- Email, intranet, internet and instant messaging
- Secure VPN access
- Large file transfer – presentations, graphics, images
- Videoconferencing
- In-flight news updates

Coverage

Currently, Swift 64 uses the spot beams of the Inmarsat-3 (I-3) satellites and the I-4 AOR satellite. When the I-4 Americas satellite (formerly the I-4 AOR) is deactivated during the repositioning process, Swift 64 traffic in the AOR will be transferred permanently back to the I-3. At this time, Inmarsat will optimise the I-3 spot beam coverage in the AOR-W.

| Pacific Ocean Region | Atlantic Ocean Region-West | Atlantic Ocean Region-East | Indian Ocean Region | Swift 64, Aero H+, Aero I coverage | Aero H coverage |

This map depicts Inmarsat's targeted area of coverage once services have been transferred from the I-4 satellite to the I-3 satellite in the Atlantic Ocean Region West. Actual coverage in this area will be confirmed once the services have been transferred and testing is complete. Please refer to inmarsat.com/coverage for further information on timescales. This map does not represent a guarantee of service. The availability of service at the edge of coverage areas fluctuates depending on a variety of conditions.

How to buy

Avionics/Antennas

Swift 64 avionics are offered by Chelton Satcom (avionics and antennas), Esterline/CMC (antennas), EMS Technologies (avionics and antennas), Honeywell (avionics), Rockwell Collins (avionics), TECOM Industries (antennas), Thales (avionics) and Thrane & Thrane (avionics).

Service provision

Aircraft operators must contract with an Inmarsat service provider. The service provider invoices for the service, either on a data volume or time basis, depending on the service used. Visit our website for contact details.

inmarsat.com/swift64