



Distributor:

TT-5000HSD+ Inmarsat Aero-H+/Swift64 aeronautical satcom



Features	Description
<ul style="list-style-type: none"> Unique multi-channel solution, integrating the Inmarsat Aero-H+ and Swift64 services 	<p>Housed in one system, the TT-5000HSD+ combines the global voice, fax and PC modem data capabilities of the Inmarsat Aero-H+ service with the new Inmarsat Swift64 aeronautical High Speed Data service.</p> <p>The Aero-H+ part provides 3 channels for global voice, fax, PC modem data and cockpit communications.</p> <p>The Swift64 part provides a fourth channel, dedicated to your high-speed data requirements. The Swift64 channel may operate either using the Integrated Services Digital Network (ISDN @ 64 kbps) or the IP-based Mobile Packet Data Service (MPDS up to 64 kbps).</p> <p>The built-in Cabin Telephone Unit (CTU) connects up to four "Full Feature" handsets and two direct 2-wire (RJ-11) interfaces for faxes, PC modems, auxiliary phones, headset interface boxes etc.</p>
<ul style="list-style-type: none"> A total of 4 channels: <ul style="list-style-type: none"> 2 global voice, fax and PC modem data 1 packet data for cockpit communications 1 High Speed Data 	<p>The Configuration Data Module (CDM) contains all system and user settings for easy replacement of the Satellite Data Unit (SDU).</p> <p>ARINC741 compatibility ensures the straightforward interfacing to current Aero-H+ antennas. Naturally, the TT-5000HSD+ system itself may easily replace older and heavier systems, thus freeing up space for additional payload or fuel savings.</p> <p>The TT-5000HSD+ may also be acquired with a specially designed small and light-weight electrically steered High Gain Antenna, TT-5006C.</p> <p>The TT-5000HSD+ arrives fully prepared for the future CNS/ATM environment.</p>
<ul style="list-style-type: none"> Extremely small, compact and light-weight 	
<ul style="list-style-type: none"> ISDN for large file transmissions, video conferencing, G4 fax etc. 	
<ul style="list-style-type: none"> Pay only "by the bit" with MPDS - ideally suited for Internet, e-mails etc. 	
<ul style="list-style-type: none"> Connect to airborne LAN 	
<ul style="list-style-type: none"> 3.1 kHz audio (14.4 kbps) for modems, G3 fax, high quality voice etc. 	
<ul style="list-style-type: none"> STE/STU for secure transmissions 	
<ul style="list-style-type: none"> ARINC741 antenna compatibility 	

Inmarsat

The Inmarsat system consists of four geostationary satellites orbiting along the Equator above the Pacific, Indian, and Atlantic Oceans. Inmarsat is a global satellite communication system that ensures fast and reliable contact through a worldwide network of Land and Ground Earth Stations (LES/GES), which can be reached from any destination except the extreme North and South Poles. The latest satellite generation (Inmarsat-3) offers both spot and global beam operation, reducing the overall power requirement while enabling faster transmission rates.

Aero-H*

Inmarsat's aeronautical services offer phone, fax and data services for passenger, administrative and Air Traffic Control (ATC) communications on board commercial, corporate and general aviation aircraft worldwide. The Inmarsat Aero-H* service is an evolution of the Aero-H service that takes advantage of the Inmarsat-3 spot beams when operating within the spot beam area. When operating outside these areas, the terminal operates using the global beam as a standard Aero-H system. Aero-H* supports the same services as Aero-H, including CNS/ATM. The TT-5000HSD* incorporates three Aero-H* channels: two channels for voice, fax and PC modem data and one channel for packet data (cockpit comms).

Swift64

The Inmarsat Swift64 service provides both the high quality and speed of a full ISDN service and the cost-effective flexibility of a full IP service (MPDS). For airline and corporate users, this combination offers unmatched access to modern communications.

Swift64 Mobile ISDN

The Integrated Services Digital Network (ISDN) offers up to 64 kbps for voice, G4 fax, data communications etc. ISDN is the preferred option for transmitting larger files, such as compressed video, digital images or graphics. ISDN traffic is charged by the length of time the user remains on-line.



**TT-5035A
Satellite Data Unit
(SDU)**

Features

- Seamless integration of Aero-H* and Swift64 services into one unit
- Low weight and power consumption
- Compact 3 MCU size
- No forced cooling required
- Built-in CTU connects up to four full-feature 4-wire handsets and two 2-wire (RJ-11) interfaces - no converter box required. Features such as conference calling, call forwarding etc. are all included
- Detachable Configuration Data Module (CDM)
- Built-In Test Equipment (BITE)
- POTS interface for fax, PC modem, cordless phone, headset interface box etc.
- ARINC429 for IRS, AHRS, FMS, MCDU, CMU, CPDF
- RS-232C port for Portable Data Loader/Configuration Management Terminal (PDL/CMT)

Characteristics

TT-5035A SDU

Dimensions: ARINC404A 3/8 ATR short, 3 MCU.
Mass: 7.2 lbs (3,3 kg)
Power: 28 V DC, 40 W typ. 67 W max. Includes handsets, DLNA, interfaces.
Connectors:
Rear: ARINC 404A
Front: SUB-D 15 Female.
Environmental:
Temperature: -25 °C to +55 °C
Altitude: MSL to 15.000 ft (A1)
DO-160D string:
[A1]CAB[S2B2]XXXXXXA[AB]A[AB]Z[RR]M[A3E3]XXA.



**TT-5014A
High Power Amplifier
(HPA)**

Features

- Small size (3 MCU), low weight and low power consumption
- No forced cooling required
- Installation outside pressure area

Characteristics

TT-5014A HPA

Dimensions: 3 MCU.
Mass: 13.2 lbs (6kg)
Environmental:
Temperature: -55 °C to +70 °C.
Altitude: MSL to 55.000 ft. (A2F2).
DO160D string:
[A2F2Z]BBB[SCLUFF1]XXXXXXA[AB]A[AB]Z[RR]M[A3E3]XXA.
Power source: 28 V DC.
Power consumption: 30 - 125 W.
Power output: 30 W linear.



**TT-5012A
Diplexer/Low Noise
Amplifier (DLNA)**

Features

- Exceeds ARINC741 Type A diplexer specifications
- 42 dB LNA gain

Characteristics

TT-5012A DLNA

Dimensions: Flatpack 10" x 7.6" x 2" (254 x 193 x 50 mm) L x W x H
Mass: 5.8 lbs (2,7 kg)
DC power: <2.4 W from SDU via RX coax. TX Port-to-Antenna loss: <1 dB.
Environmental:
Temperature: -55 °C to +70 °C.
Altitude: MSL to 55.000 ft.
DO-160C string:
[A2F2]-BA[CLY]XX
XXXXA[AB]A[AB]ZUZKXX
General: DC feed through, from TX port to antenna port.



**TT-5035A-001
Configuration Data
Module (CDM)**

Features

Located at the rear of the SDU, the Configuration Data Module (CDM) contains detailed information on the satcom installation including:

- ICAO address and Swift64 ID
- Log-on policy (manual or automatic)
- Ground Earth Station (GES) preference table
- Details on coax cable losses
- Antenna configuration
- Handset setup, configuration and ring policy
- Private and public phone directories
- Selection of navigational input for antenna steering
- PIN code activation/deactivation

The above parameters may be accessed using any one of the 4-wire handsets or a laptop/PC connected to the RS-232 port on the SDU and running the TT-5000HSD+ Configuration Utilities software program.

The CDM may be removed/inserted for easy SDU exchange - ensuring quick turn around and less time on the ground.

Characteristics

TT-5035A-001 CDM

Dimensions (L x W x H): 1.79" x 1.85" x 0.79" (45,5 x 47 x 20 mm)
Mass: 0.2 lb (90 g)



**TT-5620A/TT-5622A
Full-Feature
Handset and Cradle**

Features

- Handset with 2 x 12 character backlit LCD for configuration and system status
- Cradle with RJ-11 socket for direct connection to fax, PC modem etc.
- 4-wire and RS-485 interface
- 28 V DC/0.15 A from SDU
- Speaker for hands-free operation
- Available in black or white

Characteristics

TT-5620A/TT-5622A

Dimensions (L x W x H): 7.87" x 2.05" x 1.87" (200 x 52 x 47,5 mm)
Mass: 0.95 lb (430 g)
DO160C string:
[A1]-CBA[MNB]XXXXXXAXXXBUZKXX



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

Features

- Auxiliary handset and cradle
- 600 W ETSI TBR 21 interface
- Adjustable ringer
- 10 memory locations (speed dial)
- Stand-alone use (i.e. no cradle)
- Available in black or white

Characteristics

TT-5621B/TT-5622B

Dimensions (L x W x H): 7.87" x 2.05" x 1.87" (200 x 52 x 47,5 mm)
Mass: 0.95 lb (430 g)
DO160D string:
[A1]XCAB[(SMB2)(UFF1)]XXXXXXAXXB[RRR]M[A2E3]XXA

Swift64 Mobile MPDS

The Mobile Packet Data Service (MPDS) offers up to 64 kbps of full TCP/IP connectivity. MPDS charges "per megabit", which means that you are charged only for the amount of data transmitted - not for the time you remain connected. Specifically designed for fast, short-burst and inexpensive data transmissions, MPDS is ideal for e-mail, Internet, airborne IP server and Virtual Private Network (VPN) applications.

Thrane & Thrane's Aeronautical Satcom

Additional products in our aeronautical satcom portfolio includes:

Aero-C

The TT-3024A Aero-C is the only true global solution for aircraft tracking and two-way messaging to and from virtually anywhere in the world.

Aero-M

The TT-3000M Aero-M is a complete, stand-alone single-channel satcom for voice, fax and PC modem data. An extremely compact system, the TT-3000M weighs only 6 kg (13.2 lbs).

Aero-I

The TT-5000 Aero-I is a multi-channel satcom offering three channels for voice, fax, PC modem data, and packet data (cockpit communications), offering three antenna solutions and optional stand-alone capability.

Thrane & Thrane A/S

Founded in 1981, Thrane & Thrane is the leading manufacturer of global mobile satellite communication (satcom) based on the Inmarsat system. Thrane & Thrane provides equipment for land-based (portable and vehicular), maritime and aeronautical use as well as Land Earth Stations (LES).

Thrane & Thrane focuses exclusively on professional satcom solutions and is the only company in the world providing terminals in all Inmarsat market segments.

With more than 70.000 Thrane & Thrane terminals in operation worldwide, our total market share within the entire Inmarsat market is around 35 percent.

For further information, please visit www.tt.dk