

COMMUNICATION

► SATCOM

SWIFTBROADBAND® COMMUNICATIONS

The most advanced high-speed solution for the new SATCOM generation.

Thanks to the extended broadband capability of the new Thales TopFlight SATCOM, passengers can now use cellular telephones and Internet with worldwide roaming aboard the aircraft.

The TopFlight SATCOM establishes a new level of performance for making and receiving voice calls, SMS, E-mails or surfing the web with personal electronic devices. It enables the throughput for future applications. Taking full advantage of Inmarsat's new I4 series satellites, the Topflight SATCOM offers data rates of 432 kbps per channel. Importantly, this new standard of SATCOM continues to support Inmarsat Aero-services for flightdeck voice and data connectivity, an essential part of oceanic FANS and ATS communications.

The additional capability of Internet Protocol (IP) based broadband enables crew and operations to exchange data more efficiently and with a greater fidelity; supporting applications such as Electronic Flight Bag (EFB) and aircraft system monitoring. This ARINC -781 compliant Satellite Data Unit (SDU), part of Thales TopFlight Line, brings a breakthrough in SATCOM size and performance. The SDU is housed in a single 6 MCU enclosure, making it a cost-effective solution equally applicable to short haul and long haul aircraft, as well as regional aircraft.



THALES TOPFLIGHT SATCOM THE CONNECTIVITY SOLUTION OF TODAY AND TOMORROW!

TECHNICAL DATA

SIZE

6 MCU

POWER REQUIREMENTS

Less than 250 Watts

WEIGHT

Less than 10 kg / 22 lbs

FREQUENCY BAND

Transmission 1626.5 to 1660.5 MHz
Reception 1525.0 to 1559.0 MHz

POWER SUPPLY

115 V AC Variable Frequency for Transport Aircraft
28 V DC for Regional and Business Aircraft

BITE

Per ARINC 604-1

CERTIFICATION

INMARSAT SDM, DO160E, DO178B, DO254, DO210D, DO262

FEATURES

- Cost effective ARINC781 solution for onboard connectivity
- High speed data capacity up to 432 kbps/channel
- Embedded 30 Watts HPA
- SwiftBroadband services with Swift64 fallback
- Two Aero-Classic voice + Packet Data for cockpit use
- Highly integrated modular design efficiently supports cabin-only and cabin + cockpit needs

INFLIGHT SERVICES

- Inflight GSM mobile phone voice and data services (SMS)
- Wireless Internet web seamless access through Blackberry or laptop computers
- Connection to EFB
- Classic Aero P, R, T, C services for cockpit voice and datapacket

CONNECTIVITY

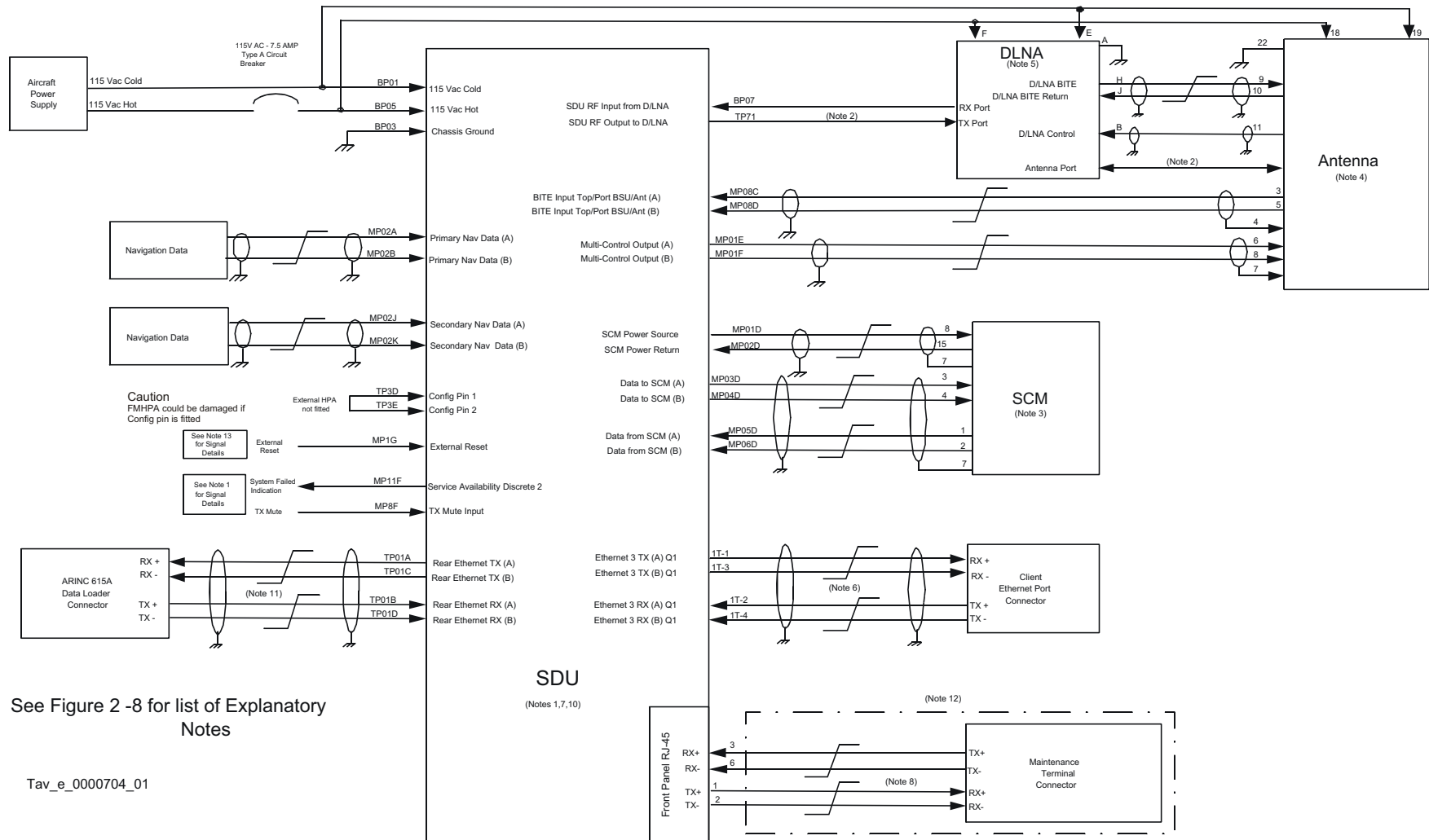
- Up to two SwiftBroadband channels for maximum data throughput
- Aeronautical class 6 (High Gain) and 7 (Intermediate Gain) SwiftBroadBand services
- Automatic fallback from SwiftBroadBand to Swift64 service
- Up to two Swift64 switch and data services (MPDS) channels
- Interfaces with pico-cell (GSM) and Wifi (Internet) servers

INSTALLATION

- ARINC781 compliant
- Lightweight compact design: Less than 10 kg for 6 MCU
- Supports the new generation of very small, low profile ARINC781 antenna subsystems from several providers
- Supports direct interface into most existing ARINC741 antenna installations (HGA)
- Scalable design to fit customer demand

INTEGRATED DESIGN

- Physical and logical partitioning enables a single SDU to safely satisfy both cabin and cockpit requirements
- Two classic voice channels and one classic data channel simultaneously available
- Automatic resource management that ensures crew connectivity under degraded modes



See Figure 2 -8 for list of Explanatory Notes

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Figure 2.7 TFS System Interconnection Diagram - SDU Type 82155A