

# AERONAUTICAL SATCOM - TRANSCEIVER SPECIFICATIONS



## eNfusion® HSD-400 high-speed data terminal

eNfusion® high-speed satellite communications transceivers interface with any ARINC 741/781 compatible antenna to provide high-speed voice and data links to Inmarsat's world-wide satellite network.

### Form Factor

The HSD-400's two (2) channel card subsystems are used for data and voice communication. Each card can support two (2) simultaneous Inmarsat Swift 64 channels, or a single (1) SwiftBroadband (BGAN) channel.

The HSD-400 accesses SwiftBroadband services over Inmarsat's I-4 satellite network. The unit can fallback on Swift 64 services over the I-3 satellites network, for ultimate reliability. The HSD-400 conforms to ARINC 600 specifications and includes front panel maintenance access port and USIM module access.

### Communication Services

SwiftBroadband	Standard IP (up to 432kbps, nominally 300-150kbps) Streaming IP (QoS service) 128kbps 64kbps 32kbps
Swift 64	Voice (4.0kbps AMBE™+2 codec) ISDN (64kbps Data or 3.1kHz Audio) Circuit switched ISDN (Voice or Data) MPDS via PPPoE
Data Interfaces	Voice (4.8kbps AMBE™ codec) Two (2) 10-Base-T Ethernet One (1) ISDN BRI
Voice Interfaces	Two (2) two-wire POTS Two (2) Euro-ISDN BRI
Control Interfaces	ARINC 429 high-speed serial bus Interface to ARINC 741/781

### Certification and Approvals

ARINC Standards	ARINC 429, ARINC 739, ARINC 600, ARINC 741/781
Military Standards	MIL-STD-704E(power/irreg. power) MIL-STD-810F(shock, acceleration)

### Operation

Receive Band	1525.0 - 1559.0 MHz
Transmit Band	1626.5 - 1660.0 MHz
Power Requirement	Dual mode power, 460W maximum
ACMode	115 VAC 300-800 Hz 1-Phase pwr.
DC Mode	28V DC
High Power Amplifier	Integrated, 60W
Monitoring	Continuous HPA/Input status Detailed status/fault reporting

### Environmental Conditions

Operating Temperatures	Section 4, Cat F2, -55°C to +70°C
Maximum Altitude	55,000 ft
Humidity	Section 6, Cat B
Crash Safety	Section 7, Cat B
Vibration	Section 8, Cat S, U (Helicopter)
Explosion Proofness	Section 9, Cat E
RF Emissions	Section 21, Cat B
Cooling	Forced air cooled

### Dimensions

ARINC 600 Standard	8-MCU	
Length	14.58"	36.45 cm
Height	7.90"	20.10 cm
Width	10.20"	25.91 cm
Weight	34.70 lbs.	15.74 kg



*A quick-access port at the front of the unit for maintenance and control interfaces.*



*Rear interface port connector inserts.*



*A removable SIM module allows quick activation and replacement.*

# ORDER

Call or e-mail for prices and details regarding system capabilities and installations.

**+1 800.600.9759 (North America)**

**+1 613.591.1043 (Worldwide)**

or [getbroadband@emsaviation.com](mailto:getbroadband@emsaviation.com)

### Part Numbers

HSD-400 with dual power supply	1252-A-3500
HSD-400 28 volt	1252-A-3200
HSD-400 115 volt SBB	1252-A-3100

# LEARN MORE

### Additional Documents

Additional documents related to installation, maintenance, satellite network hardware and software—can be requested via the phone numbers listed above.

### Related eNfusion Specification Sheets

- AMT-50 High-gain Antenna (tail mounted)
- AMT-3800 High-gain Antenna (fuselage mounted)
- CNX-100 Airborne Router
- CNX-200 Network Accelerator
- CNX-300 Mobile Access Router (with CISCO® MAR)
- CCU-200 Communications Convergence Unit (Wi-Fi, PBX)

### Coverage and Service information

Contact us for the most up-to-date coverage, service provider and airtime information. Inmarsat's current I-4 network shown below.



EMS is now part of Honeywell

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