

AERONAUTICAL SATCOM - TRANSCEIVER SPECIFICATIONS



eNfusion® HSD-440 voice & 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-440 is used to add both SwiftBroadband cabin services and cockpit/safety services to an aircraft using a single avionics unit. The unit's integrated High Power Amplifier (HPA) and two (2) transceiver subsystems provide maximum communications flexibility and redundancy. The HSD-440 provides channels for ACARS, Aero H+ voice and Inmarsat SwiftBroadband (BGAN) cabin services.

The HSD-440 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-440 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 Voice (4.0kbps AMBE™+2 codec) ISDN (64kbps Data or 3.1kHz Audio)
Swift 64	Circuit switched ISDN (Voice or Data) MPDS via PPPoE Voice (4.8kbps AMBE™ codec)
Aero H+	Cockpit Data (P, R, T channel) Voice (4.8kbps H+ service)
Data Interfaces	Two (2) 10-Base-T Ethernet One (1) ISDN BRI ARINC 429 (MCDU)
Voice Interfaces	Two (2) two-wire POTS Two (2) four-wire voice (Aero H+)
Control Interfaces	ARINC 429 high-speed serial bus ARINC 739 MCDU/Flight Mgmt

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

Part Numbers

HSD-440, Swift 64 + Classic config. 1252-A-3400

HSD-440, SwiftBroadband + Swift 64 + Classic 1252-A-3420

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

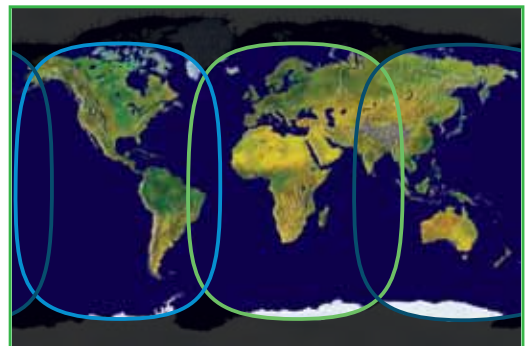
CNX-200 Network Accelerator

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

AVIATION

EMS is now part of Honeywell

EMS Aviation

400 Maple Grove Road

Ottawa, Ontario

K2V 1B8

+1 800.600.9759 (North America)

+1 613.591.1043 (Worldwide)

getbroadband@emsaviation.com

www.emsaviation.com



AS 9100
QMI-SAI Global