

AERONAUTICAL SATCOM - ANTENNA SPECIFICATIONS



eNfusion® AMT-3800 Inmarsat high-gain antenna

The eNfusion® AMT-3800 is an ARINC 781 high-gain antenna used to receive and transmit voice and data from a moving aircraft via the Inmarsat satellite network.

Form Factor

The assembly is made up of only two (2) LRUs: a top fuselage mounted antenna and a Diplexer/LowNoise Amplifier (DLNA). Phased array technology maintains gain at very low angles and meets stringent SwiftBroadband Passive Intermodulation (PIM) requirements. The AMT-3800 is approved for critical applications and air transport safety services.

The radome is optimally shaped to both be consistent with ARINC 781 standards and minimize drag forces. Its removable access panel minimizes aircraft downtime during installation and maintenance.

Connectors (ARINC 429)

RF Connector	TNC jack (MIL-STD-384A/313-2)
Digital Connector	MIL-STD-38999, series III, shell Multi Pin Power Connector

Certification and Approvals

FAA Technical STD Order	TSO-C132 Several aircraft specific STCs
RTCA Documents	RTCA/DO-160E (Environmental) RTCA/DO-178B Level D (Software)
Inmarsat	SwiftBroadband approved Aero H/H+, Swift 64, Class 6
ARINC Standards	ARINC 781 interfaces

Operation

Receive Frequency	1525.0 – 1559.0MHz
Transmit Frequency	1626.5 – 1660.5MHz
Power Supply Options	+28 Vdc or 115 Vac (wide freq.)
Power Consumption	35W Max
Low Angle RF Coverage	10 dBic min gain (98% of coverage) 12 dBic min gain (90% of coverage)

Environmental Conditions

Maximum Altitude	70,000 Ft	21,336 M
Minimum Altitude	none	
External Pressure Limit	4.5kPa	
Maximum Speed	530KTAS, Mach 0.95	
Operational Temperature	-57°C to +71°C	-67°F to +158°F
Storage Temperature	-57°C to +85°C	-70°F to -185°F
Cooling Requirements	none	
Temperature Variation	10°C per minute, 3 cycles	
Explosion Proofness	Environment III	
RF Susceptibility	RTCA/DO-160E	
Grounding	via aircraft interface screws/lugs	

Dimensions

Antenna Length	43.0"	109.2 cm
Antenna Height	2.5"	6.4 cm
Antenna Width	14.3"	36.3 cm
Antenna Weight	19.8 lbs.	9.0 kg
Diplexer Length	11.1"	28.2 cm
Diplexer Height	2.0"	5.1 cm
Diplexer Width	7.8"	19.8 cm
Diplexer Weight	7.0 lbs.	3.2 kg

Mounting

Close to the top center line of the fuselage
Antenna interface mounting (optional) for highly curved fuselage
No special tools needed for installation



*TSO-C132 approved form.
Removable access panel.*



*ARINC 781 constant interfaces
for fast maintenance.*



Low drag co-efficient and footprint.

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

AC model antenna (white)	1242-A-0010-01
DC model antenna (white)	1242-A-0010-02
DLNA	1242-A-0006
Connector kit	1242-K-0290-01
AIM adapter	(airframe dependant)
Erosion boot	1242-F-0295
Maintenance cable	1242-F-0121

LEARN MORE

Additional Documents

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



EMS is now part of Honeywell



AS 9100
QMS-SAI Global

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