

AERONAUTICAL SATCOM - ANTENNA SPECIFICATIONS



eNfusion® AMT-3500 Inmarsat intermediate-gain antenna

The eNfusion® AMT-3500 is an ARINC 781 intermediate-gain antenna used to receive and transmit voice and data from an 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/Low Noise Amplifier (DLNA). Phased array technology maintains gain at very low angles and meets stringent SwiftBroadband Passive Intermodulation (PIM) requirements.

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

RF Connector	TNC jack (MIL-STD-384A/313-2)
Digital Connector	MIL-STD-38999, series III, shell size 13
	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	Aero I (Classic Services) SwiftBroadband (Class 7 Multi-channel)
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	21W Typical
Low Angle RF Coverage	6 dBic min gain (98% of coverage) 10 dBic min gain (75% 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	-70°F to +159°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	34.5"	87.6 cm
Antenna Height	2.5"	6.4 cm
Antenna Width	9.5"	24.1 cm
Antenna Weight	11.7 lbs.	5.3 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



Low profile radome and ARINC 781 form factor allows for ease of maintenance on Air Transport platforms



ARINC 781 Type F DLNA provides superior multi-channel performance



Solid state technology provides exceptional reliability

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-2210-01
DC model antenna (white)	1242-A-2210-02
DLNA (Type F)	1242-A-0006
Connector kit	1242-K-0290-01
AIM adapter	(airframe dependant)
Antenna Erosion boot	1242-F-2295
Maintenance cable	1242-F-0121

Optional DLNA types and ancillary equipment available

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

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