

# AERONAUTICAL SATCOM - ANTENNA SPECIFICATIONS



The eNfusion® AMT-700 is a complete ARINC 781 high-gain antenna. The antenna is used to receive and transmit voice and data from aircraft via the Inmarsat satellite network.

## eNfusion® AMT-700 broadband Inmarsat high-gain antenna

### Form Factor

The AMT-700 is a mechanically steered Inmarsat antenna that meets ARINC 781 standards. It is made up of only two (2) LRUs: an antenna unit and a diplexer/low noise amplifier. The antenna is light weight (4.3 lbs) and has an integrated ACU in order to provide greater flexibility for installation.

The antenna's technology and design (U.S. patent pending) result in the highest gain of any Inmarsat Mechanical High Gain Antenna - achieving greater than 13.5dBic over the Inmarsat coverage volume.

### Certification and Approvals (pending)

FAA Technical STD Order	TSO-C132
RTCA Documents	RTCA/DO-160E (Environmental) RTCA/DO-178B Level D (Software) MIL-STD-704/810/461
Inmarsat	Class 6 multi-channel assessed (SwiftBroadband, Aero H/H+, Swift 64)
ARINC Standards	ARINC 781 electrical interfaces

### Operation

Receive Frequency	1525.0 – 1559.0 MHz
Transmit Frequency	1626.5 – 1660.5 MHz
Power Supply Options	+28 Vdc
Power Consumption	nominal 15W, Maximum 30W
Low Angle RF Coverage	≥13.5 dBic gain (100% of Inmarsat coverage volume) Mechanically steers to -10° below horizon

### Environmental Conditions

Maximum Altitude	70,000 ft	21,336 m
Minimum Altitude	none	
Operational Temperature	-70°C to +71°C	-94°F to +160°F
Storage Temperature	-70°C to +85°C	-94°F to +185°F
Cooling Requirements	none	
Temperature Variation	10°C per minute, 3 cycles	
RF Susceptibility	RTCA/DO-160E	
Grounding	via aircraft interface screws/lugs	

### Dimensions

Antenna Length	10.0"	25.40 cm
Antenna Height	9.7"	24.64 cm
Antenna Width	10.0"	25.40 cm
Antenna Weight	4.3 lbs.	1.9 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

The AMT-700 is designed to fit in the empennage of the aircraft under a tail mounted radome. The antenna is also mounted at other locations on the airframe to suit specific aircraft requirements



The AMT-700 is typically housed under a tail-mounted radome, but can also be mounted at several locations on the fuselage.



The use of an integrated ACU enables greater flexibility during installation and reduces the number of units required.



ARINC 781 DLNA interfaces allow this system to be used with any manufacturer's Swiftbroadband approved HPA or Terminal.

# 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

AMT-700 Subsystem Kit	1428-K-0001-02
└ High-Gain Antenna (integral ACU)	1428-A-0010-02
└ DLNA, ARINC 781 Type F	1242-A-0006

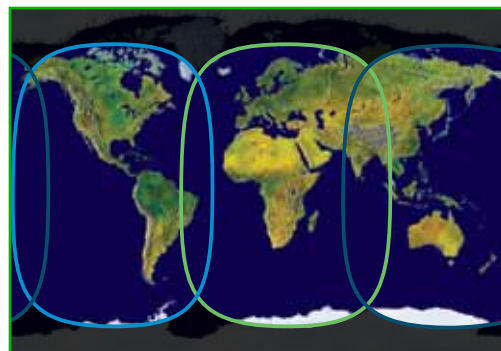
# LEARN MORE

## Additional Documents

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

## Coverage and Service information

Contact us for the most up-to-date coverage, service provider and airtime information (Classic Aero H/H+ Data, Swift 64 and SwiftBroadband services). Inmarsat's current I-4 network shown below.



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