AMT-700

Inmarsat High Gain Antenna **Including AMT-50 Conversion**

The eNfusion® AMT-700 is a complete ARINC 781 High Gain Antenna (HGA). The antenna is used to receive and transmit voice and data from aircraft via the Inmarsat satellite network, and supports multichannel SwiftBroadband (Class 6 services).

FORM FACTOR

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

The antenna's technology and design (U.S. p atent pending) result in the highest gain of any Inmarsat mechanical high gain antenna - achieving greater than 13.5dBic over 100 percent of the Inmarsat coverage volume.

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	

Other Details

• Complete offering is AMT-700 plus conversion kit which provides an easy installation path.

• Honeywell Repair Service stopped supporting the AMT-50 in 2022.

• Consider replacing with our conversion kits and the AMT-700.



CUSTOMER VALUE (BENEFITS)

- Improved reliability by 3X
- Increase in gain which improves network quality and availability
- Ease of installation with conversion kit which reduces labor



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.



AMT-700

CERTIFICATION AND APPROVALS		
FAA Technical STD Order	TSO-C132	
RTCA	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)	

ENVIRONMENTAL CHARACTERISTICS		
Maximum Altitude	70,000 ft. (21,336 m)	
Minimum Altitude	None	
Operational Temperature	-70°C to +71°C	
Storage Temperature	-70°C to +85°C	
Cooling Requirements	None	
Temperature Variation	10°C per minute, 3 cycles	
RF Susceptibility	RTCA/DO-160E	
Grounding	Via aircraft interface screws/lugs	

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- Designed to fit in the empennage of the aircraft under a tail-mounted radome.
- Mounted at other locations on the airframe to suit specific aircraft requirements.

OPERATION		
Receive Frequency	1525.0 – 1559.0MHz	
Transmit Frequency	1626.5 – 1660.5MHz	
Power Supply	+28 VDC	
Low Angle RF Coverage	>13.5 dBic gain (100% of Inmarsat coverage volume). Mechanically steers to -10° below horizon	

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 lb. (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 lb. (3.2 kg)

AMT-50 to AMT-700 Conversion Kit - Part Numbers

- 88003400-001 REV A AMT 50-700 ANTENNA – ADAPTER KIT (1.8 m. cable length)
 - 88003397-001 REV A AMT 50-700 ANTENNA – CONTROL CABLE
 - 88003398-001 REV A AMT 50-700 ANTENNA – RF CABLE
 - 88003396-001 REV A AMT 50-700 ANTENNA - LEFT HAND BRACKET
 - 88003395-001 REV A AMT 50-700 ANTENNA – RIGHT HAND BRACKET

OR

 88003400-002 REV A AMT 50-700 ANTENNA – ADAPTER KIT (3.0 m. cable length)

OR

88003400-003 REV A AMT 50-700
ANTENNA – ADAPTER KIT (6.0 m. cable length)

THE FUTURE IS WHAT WE MAKE IT

