



## IGA-2000 INMARSAT Intermediate Gain Antenna



### FEATURES:

- Exceeds INMARSAT Aero-I performance specifications
- Excellent performance within all spot beams
- Supports all INMARSAT Aero-I services; including multichannel voice and data
- Optional BSU available for ARINC 741 applications
- Integrated base plate suitable for most airframes for simple, low cost installations
- High MTBF (>50,000 hours); low MTTR (<1 hour)
- Low profile, low drag design for low front and side airloads, eliminates airframe fatigue potential
- Available through Rockwell Collins Avionics & Communications Div., Cedar Rapids, Iowa

Electrical Specifications	
Antenna Gain	7.5-9.0 dBic typical, 6.0 dBic minimum
Satellite Discrimination	10 dB typical, 7 dB minimum for satellites spaced 80° or greater in longitude.
Axial Ratio	< 6 dB
VSWR	< 1.51
RF Input Power	30 Watts max
Polarization	Right Hand Circular
Prime Power Requirements	10 Watts typical (provided by avionics or optional BSU)
Operating Frequency Band	Receive: 1525.5 - 1560.0 MHz Transmit: 1626.5 - 1660.5 MHz
Antenna Coverage	> 90% of the INMARSAT service coverage with in hemisphere, excellent low angle performance
Beam Steering	50 discrete antenna beams, steerable in azimuth and elevation for outstanding satellite discrimination performance.

Mechanical Specifications	
Dimensions	28.0" L x 12.25" W x 2.9" H (71 cm x 31 cm x 7.4 cm)
Weight	Antenna weight with integrated DIP/LNA (Includes Radome and Baseplate): 18 Lbs. (8.2 Kg.) Antenna weight without integrated DIP/LNA: 12 Lbs. (5.5 Kg.) DIP/LNA: 6.5 Lbs. (2.7 Kg.)
Finish	Stock radome is painted with white teflon paint; other colors may be applied.

Interface Connectors	
RF	TNC Female (ARINC 761)
Control	D38999/21YB35CN

Environmental Specifications			
TEMPERATURE		ALTITUDE	
Operating	-55°C to +70°C	Operating	70,000 Feet
Survival	-55°C to +85°C	Survival	70,000 Feet
		Humidity	Category C, 95% Min
		Lightning	Category 2A, Zone 2A
Other Environmental Specifications			
Other tests are conducted using RTCA/DO-160D test procedures (can be qualified for rotary wing installation).			

### DIPLEXER/LNA FEATURES

- Proven off-the-shelf component
- Small, compact, lightweight
- Qualified for installation outside the pressure vessel
- Mounted inside the airframe

Electrical Specifications	
Transmit Insertion	Loss Less than 0.6 dB
Receive Noise Figure	Less than 1.8 dB
Transmit-Receive Rejection	Greater than 120 dB
Power Requirement	28 VDC

Electrical Specifications	
Dimensions	1.97" H x 7.76" W x 11.05" L (50mm x 197mm x 280mm)
Weight	6.5 lbs. (2.7 Kg.)