



Features

- Intelsat Compliant
- Multi-Band C, X, Ku Band Frequencies
- Multiple Integration Options
- Compact Packaging
- Superior Stability in Wind
- Excellent Reliability
- Minimal Maintenance
- Less than 15 min Assembly Time
- Captive Hardware
- Autolocate Controller Options
- Integrated Feed Boom Options

Overview

The 1.8 Meter Motorized Flyaway Antenna from Advantech Wireless offers high performance in a lightweight, high value package. This antenna is specifically designed to provide a lower cost alternative for autolocate system requirements. The manual antenna configuration can be supplied with autolocate assistance through the use of a customer furnished web browser. This option allows the untrained user to easily position and peak the antenna on the satellite without the requirement of a fully motorized system. Alternatively, a fully motorized system can be provided to offer the same result at the push of a button. A ruggedized outdoor mounted controller, motorized azimuth hub assembly, and motorized elevation jack assembly are used in the fully motorized configuration. Both manual and motorized systems are designed specifically for lower power VSAT applications using a BUC and a modem. Other options are available as well. The system is also offered with integrated feed boom assemblies that can pack in a case. Each assembly can include the feed, BUC, LNB and interfacing waveguide. The antenna meets international performance specifications for commercial or military applications and is readily available in C, X, and Ku band frequencies.

PRODUCT FEATURES & SPECIFICATIONS

Technical Specifications

Electrical Specifications	2 Port Cross-Pol C Band Linear Feed		2 Port Cross-Pol C Band Circular Feed		2 Port X Band Circular		2 Port Cross Pol Ku Band Linear	
	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx
Frequency (GHz)	3.40 - 4.20	5.85 - 6.725	3.625 - 4.20	5.85 - 6.425	7.25 - 7.75	7.9 - 8.4	10.70 - 12.75	13.75 - 14.5
Gain (Midband, dBi)	35.4	39.3	35.4	39.5	41.3	42.0	45.3	46.6
Noise Temperature (°K)								
10 deg EI	41		41		60		55	
20 deg EI	36		36		56		50	
Axial Ratio			3.0 dB	2.3 dB	1.5 dB	1.5 dB		
Cross Pol								
On Axis	-30 dB	-30 dB	-15.3 dB	-17.5 dB	-21.3 dB	-21.3 dB	-30 dB	-30 dB
in 1 dB BW	-23 dB	-23 dB	-15.3 dB	-17.5 dB	-21.3 dB	-21.3 dB	-23 dB	-23 dB
Sideline Compliances	IESS 207		IESS 207		Meets DSCS		Meets ITU 580	
VSWR	1.50:1	1.30:1	1.50:1	1.30:1	1.30:1	1.30:1	1.50:1	1.30:1
Isolation								
Tx/Rx	-60 dB	0 dBm input	-60 dB	0 dBm input	-110 dB	0 dBm input	-110 dB	0 dBm input
Rx/Tx	0 dBm input	-60 dB	0 dBm input	-60 dB	0 dBm input	-110 dB	0 dBm input	-35 dB

Mechanical / Environmental Specifications

Reflector	1.8 meters (70.87in) - Glass Fiber Reinforced Polyester
Reflector Configuration	Parabolic Single Offset, 0.6 F/D (4 piece or 7 piece option)
Antenna Travel	
Azimuth	± 180° continuous
Elevation	5 - 90° of reflector bore sight
Polarization	± 90°
Antenna Packaging	
Case 1- Pedestal Legs/ Backbeam	1 @ 44.9" x 25.3" x 16.5" / 100 lbs
Case 2- Az Hub / Foot Pads / EI Actuator / CTLR	1 @ 37.5" x 27.5" x 14.5" / 120 lbs
Cases 3 & 4 - (4 piece reflector)	2 @ 42" x 13" x 34.5" / 76 lbs ea
Total Weight (less feed options)	420 lbs (191 kg) – 4 pc reflector or 372 lbs (169 kg) – 7 piece carbon fibre
Temperature	
Operational	-20 to 60°C (-4 to 140°F)
Survival	-40 to 70°C (-48 – 158°F)
Pointing Loss (operational winds)**	3dB peak (Ku-band Rx)
Winds	
Operational	30 Gusting to 45 mph (40 kph G 72 kph) with ballast or anchors
Survival	60 mph (96 kph) with tie downs / any position
Feedboom Mounted Integration***	60 lbs (27.2 kg)
Rain	
Operational	2 in/h (5 cm/h)
Survival	4 in/h (10 cm/h)
Relative Humidity	0 -100% (condensing)
Solar Radiation	360 btu/h/ft ² (1000 Kcal/h/m ²)
Radial Ice (survival)	1/2 in (12.7 mm)
Corrosive Atmosphere	As encountered in coastal and/or industrial areas

* Feed packaged separately dependent on options ordered

** Performance dependent on proper installation and ballast/anchors

*** Dependent on position of weight. Consult Engineering for details

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