

MODEL 1261 Avion

1.2 Meter Carbon Fiber Flyaway Antenna



- *Ships in 2 Ruggedized All Weather IATA Compliant Cases*
- *Intelsat and Eutelsat Compliant*
- *Multi-Band Capable*
- *Sat-Lite Proprietary 7 Piece Segmented Carbon Fiber Precision Reflector*
- *Compact Pedestal featuring easy point and peak control*
- *High Gain / Low Cross Pol Design*
- *Multiple Integration Options*
- *Excellent Reliability with Minimal Maintenance*

The Sat-Lite Technologies Model 1261 Avion manual flyaway antenna is highly portable and designed to meet IATA weight and dimension requirements for checked baggage on airlines. The antenna features Sat-Lite's unique 7-piece segmented carbon fiber composite reflector designed for unmatched performance. Assembly time for either antenna is less than 15 minutes. The elevation-over-azimuth pedestal provides excellent stiffness characteristics and convenience for the user when pointing and peaking on a satellite.

In addition, the antenna is designed to meet international performance specifications for multiple applications. Multiple feed and packaging configurations can be supplied for a specific requirement that include low and high power amplifier configurations for each frequency band.



<i>Electrical Specifications</i>	2 Port Cross Pol Ku Band Linear / Standard Feed		2 Port Cross Pol Ku Band Linear / Mode Matched Feed		2 Port Cross Pol Ka Band Circular Polarization	
	Rx	Tx	Rx	Tx	Rx	Tx
Frequency (GHz)	10.70 - 12.75	13.75 - 14.5	10.95 - 12.75	13.75 - 14.5	19.2 - 21.2	29.0 - 31.0
Gain (Midband, dBi)	41.6	43.4	41.6	43.4	46.0	49.2
Typ. Noise Temperature (°K)						
10 deg EI	69		66		153	
20 deg EI	59		58		102	
Axial Ratio (low Axial Ratio Version)					2.0 dB	1.0 dB
Cross Pol (std)						
On Axis	-35 dB	-35 dB	-35 dB	-35 dB	-18.7 dB	-24.8 dB
in 1 dB BW	-27 dB	-27 dB	-25 dB	-35 dB	-18.7 dB	-24.8 dB
Sidelobe Compliances	Meets ITU 580 FCC		ITU 580 Eutelsat		Meets ITU 580	
VSWR	1.35:1	1.30:1	1.50:1	1.30:1	1.35:1	1.30:1
Isolation						
Tx/Rx	-85 dB	0 dBm input	-85 dB	0 dBm input	-85 dB	0 dBm input
Rx/Tx	0 dBm input	-35 dB	0 dBm input	-35 dB	0 dBm input	-30 dB

<i>Mechanical / Environmental Specifications</i>	
Reflector	127 cm (50.2 in) Carbon Fiber
Reflector Configuration	7 Piece Proprietary Single Offset
Antenna Travel	
Azimuth	+/-180° continuous with fine adjust
Elevation	5 - 90° of reflector bore sight
Polarization	± 90°
Packaging	
Pedestal Case (Roto Molded)	26" x 19" x 16.6" (63 lb / 29 Kg)
Reflector Case (Compression Molded)	24.9" x 23.7" x 13.1" (41 lb / 19 Kg)
Temperature	
Operational	-30 to 60°C (-22 - 140°F)
Survival	-40 to 70°C (-40 - 158°F)
Winds	
Operational	30 mph Gusting to 45 mph (48 kph G 72 kph)
Survival (tied down, any position)	60 mph
Integration	
Base Mounted BUCs	Packs Separately
Feed Mounted BUCs	Typical Small BUCs < 16 Watts Ku
Rain	
Operational	4 in/h (10 cm/h)
Survival	6 in/h (15 cm/h)
Relative Humidity	0 - 100%
Solar Radiation	360 btu/h/ft ² (1000 Kcal/h/m ²)
Radial Ice (survival)	1 in (25.4 mm)
Corrosive Atmosphere	As encountered in coastal and/or industrial areas