

1521 AGILIS

1.5 Meter Flyaway Antenna



- *Intelsat and Eutelsat Compliant*
- *Multi-Band C, X, Ku or Ka band Capable*
- *4 Piece Segmented Carbon Fiber Reflector*
- *Compact Pedestal featuring easy point and peak control*
- *Ships in 2 Ruggedized Cases*
- *High Gain / Low Cross Pol Design*
- *Superior Stability in Wind*
- *Multiple Integration Options*
- *Excellent Reliability*
- *Minimal Maintenance*

The Sat-Lite Technologies Model 1521 flyaway antenna is highly portable, compact, light-weight, and can be assembled by one person in less than 15 minutes. The antenna features a 4 piece segmented carbon fiber composite reflector designed to provide exceptional performance in a lightweight package. The elevation-over-azimuth pedestal provides excellent stiffness characteristics and convenience for the user when pointing and peaking on a satellite. The antenna packs in 2 ruggedized shipping cases.

In addition, the antenna is designed to meet international performance specifications for commercial or military applications and is readily available in C, X, Ku and/or Ka band frequencies. Multiple feed configurations and paint schemes are readily available.



TECHNICAL SPECIFICATIONS



<i>Electrical Specifications</i>	2 Port C Band Linear Feed		2 Port C Band Circular Feed		2 Port X Band Circular		2 Port Cross Pol Ku Band Linear / Standard Feed		2 Port Cross Pol Ku Band Linear / Mode Matched Feed	
	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx
	Frequency (GHz)	3.625 - 4.20	5.85 - 6.425	3.625 - 4.20	5.85 - 6.425	7.25 - 7.75	7.9 - 8.4	10.70 - 12.75	13.75 - 14.5	10.95 - 12.75
Gain (Midband, dBi)	33.4	37.2	33.3	37.1	39	39.6	43.4	45.0	43.4	45.2
Noise Temperature (°K)										
10 deg EI	45		54		79		70		65	
20 deg EI	40		47		61		60		58	
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	-35 dB	-35 dB	-35 dB	-35 dB
in 1 dB BW	-26 dB	-26 dB	-15.3 dB	-17.5 dB	-21.3 dB	-21.3 dB	-27 dB	-27 dB	-25 dB	-35 dB
Sidelobe Compliances	IESS 601 Std G		IESS 601 Std G		Meets DSCS		Meets ITU 580		Meets ITU 580	
VSWR	1.50:1	1.30:1	1.50:1	1.30:1	1.30:1	1.30:1	1.35:1	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	-85 dB	0 dBm input	-85 dB	0 dBm input
Rx/Tx	0 dBm input	-50 dB	0 dBm input	-50 dB	0 dBm input	-110 dB	0 dBm input	-30 dB	0 dBm input	-30 dB

<i>Mechanical / Environmental Specifications</i>	
Reflector	1.5 meters (58.7 in) Carbon Fiber Reinforced Polymer
Reflector Configuration	4 Piece Segmented Carbon Fiber Single Offset
Antenna Travel	
Azimuth	360° continuous with fine adjust
Elevation	0 - 90° of reflector bore sight
Polarization	± 90°
Packaging (2 Cases)	
Pedestal Case	44.9" x 25.3" x 16.5" (100 lbs)
Reflector Case	42" x 13" x 34.5" (100 lbs)
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)
Integration	
Feedboom Mounted ¹	35 lbs
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

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¹ Dependent on mounting position relative to elevation axis
 Note: Specifications subject to change without notice