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.

SAT-LITE technologies

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TECHNICAL SPECIFICATIONS

Electrical Specifications	2 Port C Band Linear Feed		2 Port C Band Circular Feed		2 Port X Band Circular (Low Axial Ratio)		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	
	Rx	Tx	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	13.75 - 14.5	20.2 - 21.2	30.0 - 31.0
Gain (Midband, dBi)	33.4	37.2	33.3	37.1	38.9	39.5	43.4	45.0	43.4	45.2	47.8	51.1
Noise Temperature (°K)												
10 deg El	45		54		84		70		65		155	
20 deg El	40		47		66		60		58		106	
Axial Ratio			3.0 dB	2.3 dB	0.5 dB	0.5 dB					1.5 dB	1.0 dB
Cross Pol												
On Axis	-30 dB	-30 dB	-15.3 dB	-17.5 dB	-30 dB	-30 dB	-35 dB	-35 dB	-35 dB	-35 dB	-21.3 dB	-24.8 dB
in 1 dB BW	-26 dB	-26 dB	-15.3 dB	-17.5 dB	-30 dB	-30 dB	-27 dB	-27 dB	-25 dB	-35 dB	-21.3 dB	-24.8 dB
Sidelobe Compliances	IESS 601 Std G		IESS 601 Std G			Meets DSCS		Meets ITU 580 FCC		Meets ITU 580 FCC Eutelsat		Meets DSCS
VSWR	1.35:1	1.30:1	1.35:1	1.30:1	1.30:1	1.30:1	1.35:1	1.30:1	1.40:1	1.30:1	1.35:1	1.35:1
Isolation												
Tx/Rx	-70 dB	0 dBm input	-70 dB	0 dBm input	-110 dB	0 dBm input	-85 dB	0 dBm input	-85 dB	0 dBm input	-85 dB	0 dBm input
Rx/Tx	0 dBm input	-30 dB	0 dBm input	-30 dB	0 dBm input	-110 dB	0 dBm input	-30 dB	0 dBm input	-30 dB	0 dBm input	-50 dB

Mechanical / Environmental Specifications	
Reflector	1.5 meters (58.7 in) Carbon Fiber Reinforced Polymer
Reflector Configuration	4 Piece Segmented Carbon Fiber Single Offset
Antenna Travel	
Azimuth	+/-180° continuous with fine adjust
Elevation	5 - 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" (80 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

850-0011-A

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

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