1031 AGILIS

1.0 Meter Motorized Carbon Fiber Flyaway Antenna

- ***Intelsat and Eutelsat Compliant (with Appropriate Feed)***
- ***Airline Checkable***
- ***Multi-Band X, Ku or Ka band Capable***
- ***7 Piece Segmented Carbon Fiber Reflector***
- ***Compact Pedestal featuring easy point and peak control***
- ***High Gain / Low Cross Pol Design***
- ***Multiple Integration Options***
- ***Manual and Motorized Configurations***
- ***Fully Integrated Control System***
- ***Excellent Reliability***
- ***Minimal Maintenance***

The Sat-Lite Technologies Model 1031 motorized flyaway antenna is highly portable, compact, light-weight, and can be assembled by one person in less than 15 minutes. The antenna features a 7 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 is 3 ruggedized airline checkable shipping cases.

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

SAT-LITE technologies

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TECHNICAL SPECIFICATIONS

Electrical Specifications	2 Port X Band Circular		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	Rx	Tx
Frequency (GHz)	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)	35.7	36.3	39.8	41.6	39.8	41.6	44.4	47.7
Noise Temperature (°K)								
10 deg El	80		69		66		153	
20 deg El	65		59		58		102	
Axial Ratio	1.5 dB	1.5 dB					1.5 dB	1.0 dB
(low Axial Ratio Version)	0.5 dB	0.5 dB						
Cross Pol (std)								
On Axis	-21.3 dB	-21.3 dB	-35 dB	-35 dB	-35 dB	-35 dB	-21.3 dB	-24.8 dB
in 1 dB BW	-21.3 dB	-21.3 dB	-27 dB	-27 dB	-25 dB	-35 dB	-21.3 dB	-24.8 dB
Sidelobe Compliances		Meets DSCS		Meets ITU 580 FCC		Meets ITU 580 FCC		Meets ITU 580
VSWR	1.30:1	1.30:1	1.35:1	1.30:1	1.50:1	1.30:1	1.35:1	1.30:1
Isolation								
Tx/Rx	-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	-110 dB	0 dBm input	-30 dB	0 dBm input	-30 dB	0 dBm input	-30 dB

Mechanical / Environmental Specifications	
Reflector	1 M (39.4 in) Carbon Fiber
Reflector Configuration	7 Piece Segmented Single Offset
Antenna Travel	
Azimuth	360° continuous with fine adjust
Elevation	5 - 90° of reflector bore sight
Polarization	± 90°
Packaging	
Pedestal & RF Cases (Compression Molded / Outdoor)	25.6" x19.5" x 15.6" (<32 Kg Ea)
Reflector Case (Compression Molded / Outdoor)	25.6" x19.5" x 15.6" (<32 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
Survival (tied down, stowed above 85 deg el.)	70 mph
Integration	
Feedboom Mounted [1]	25 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

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

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