1233 Celero

1.2 Meter Motorized Flyaway Antenna

- ***Intelsat Compliant***
- ***Multi-Band Capable***
- ***Multiple Integration Options***
- ***Compact Packaging***
- ***Superior Stability***
- ***Excellent Reliability***
- ***Minimal Maintenance***
- ***Less than 15 min Assembly Time***
- ***Captive Hardware***
- ***High Performance Motorization Package***
- ***Integrated Control System for 1 Button Auto Acquire***

The Sat-Lite Technologies Model 1233 Celero 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 2 or 4 piece segmented glass fiber reinforced reflector with compact pedestal and is designed to be value priced while providing 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 3 ruggedized shipping cases as standard configuration, other options are available.

In addition, the antenna is designed to meet International performance specifications for commercial or military applications. Multiple feed configurations and paint schemes are readily available. The control system is integrated within the unit. The full travel azimuth and elevation ranges allow the control system to provide true autolocate and peak options for the end user with simple 1 button operation.

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		2 Port Cross Pol Ku Band Linear / Standard Feed	
		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
Gain (Midband, dBi)		31 9	35 9	31 9	35 9	37 2	37 8	41 7	43 2
Noise Temperature (°K)									
	10 deg El	45		54		79		45	
	20 deg El	40		47		61		31	
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 contour	-26 dB	-26 dB	-15 3 dB	-17 5 dB	-21 3 dB	-21 3 dB	-30 dB	-30 dB
Sidelobe Compliances		IESS 601 Std G		IESS 601 Std G			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 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	-50 dB	0 dBm input	-50 dB	0 dBm input	-110 dB	0 dBm input	-35 dB

Mechanical / Environmental Specifications	
Reflector	1.2 meters (47.2 in) Glass Fiber Reinforced Polyester
Reflector Configuration	2 or 4 Piece Segmented Single Offset
Antenna Travel	
Azimuth	+/- 180° continuous
Elevation	5 - 90° of reflector bore sight
Polarization	± 90°
Packaging (3 Cases)	
Backbeam & Pedestal Base (Compression Molded Case)	30.5" x 20.5" x 15.7" (75 lbs)
Legs / Feed / Controller (Compression Molded Case)	30.5" x 20.5" x 15.7" (75 lbs)
Reflector Case	30" x 27" x 17" (85 lbs) - 4 Piece Option 51" x 31.5" x 13.5" (95 lbs) - 2 Piece Option
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]	30 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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