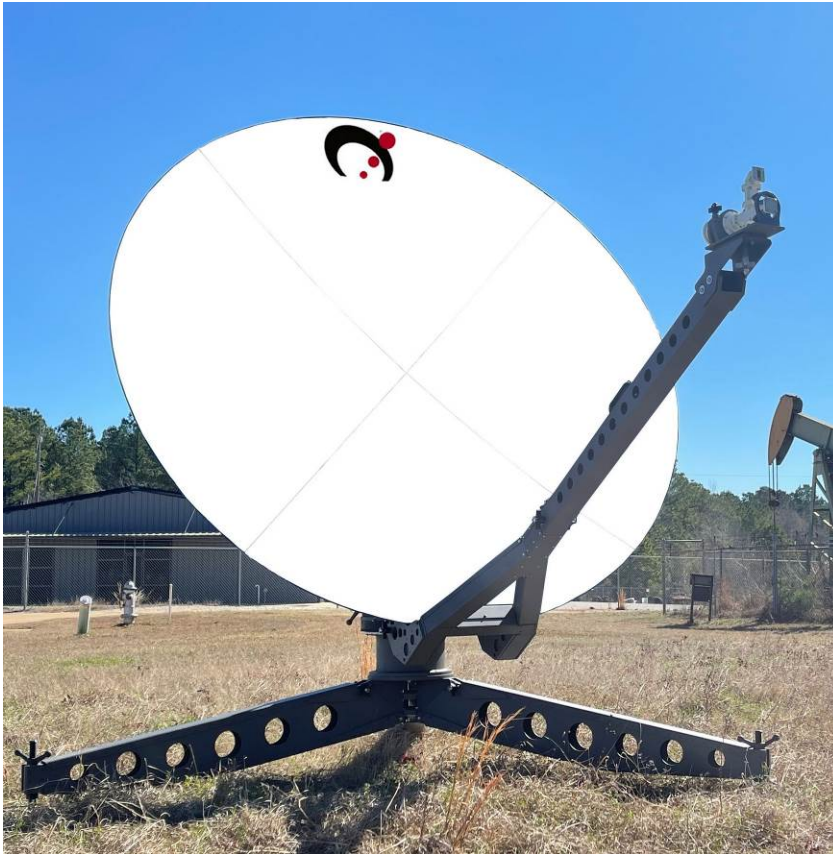


2423 Celero

2.4 Meter Flyaway Antenna



- *Intelsat Compliant*
- *Multi-Band C, X, Ku band Frequencies*
- *Multiple Integration Options*
- *Compact Packaging*
- *Superior Stability in Wind*
- *Excellent Reliability*
- *Minimal Maintenance*
- *Less than 20 min Assembly Time*
- *All Captive Hardware*

The Sat-Lite Technologies Model 2423 Celero flyaway antenna offers the most robust performance in its class. This antenna features a 4-piece carbon composite segmented reflector designed to provide excellent gain characteristics. The custom-designed elevation-over-azimuth tripod pedestal provides high stiffness with minimal assembly time and offers a unique full motion azimuth design with a fine adjust mechanism. The unique pedestal and leg design also offers 5 to 90 deg of elevation travel with a fully integrated feed boom. The antenna design is modular which reduces the number of pieces required for assembly and results in an improved packaging scheme requiring less time and effort to pack or unpack the antenna. Cases are included.

The antenna is designed to meet international performance specifications for commercial or other applications and is readily available in C, X, and Ku band frequencies. Multiple feed configurations are available.



<i>Electrical Specifications</i>	2 Port Cross-Pol C Band		2 Port Cross-Pol C Band		2 Port X Band		2 Port Cross Pol Ku Band	
	Linear Feed		Circular Feed		Circular		Linear	
	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx
Frequency (GHz)	3.40 - 4.20	5.85 - 6.725	3.625 - 4.20	5.85 - 6.425	7.25 - 7.75	7.9 - 8.4	10.95 - 12.75	13.75 - 14.5
Gain (Midband, dBi)	38.0	41.8	38.0	41.8	43.7	44.3	47.1	49.1
Noise Temperature (K)								
10 deg El	44		56		78		64	
20 deg El	40		52		74		60	
Axial Ratio			3.0 dB	2.3 dB	1.5 dB	1.5 dB		
Cross Pol								
On Axis	-30 dB	-30 dB	-16 dB	-17 dB	-21 dB	-21 dB	-35 dB	-35 dB
Sidelobe Compliances	IESS 207		IESS 207		ITU 580 / Mil-Std 188-164		IESS 208	
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
Isolation								
Tx/Rx	-75 dB	0 dB	-75 dB	0 dB input	-110 dB	0 dB input	-80 dB	0 dB input
Rx/Tx	0 dB input	-60 dB	0 dB input	-60 dB	0 dB input	-110 dB	0 dB input	-35 dB
Output Interface	CPR-229F	CPR-137F	CPR-229F	CPR-137F	WR-112 (UBR84)	WR-112 (UBR84)	WR75 Flat	WR75 Flat

<i>Mechanical / Environmental Specifications</i>	
Reflector	2.4 meters (96 in) Carbon/Glass Fiber Reinforced Polymer
Reflector Configuration	Parabolic Single Offset (4 piece)
Antenna Travel	
Azimuth	360° with fine adjustment
Elevation	5 - 90° of reflector bore sight
Polarization	± 90°
Antenna Packaging	
Case 1 - Reflector Case	1 @ 51" x 50 1/2" x 13 " / 136 lbs (61.8 kg ea.)
Case 2 - Backbeam Lower/Lower Feedboom	1 @ 45" x 25" x 17" / 140 lbs (63.6 kg)
Case 3 - Pedestal Legs / Upper Feedboom	1 @ 67 1/4" x 27 3/8" x 13" / 140 lbs (63.6 kg)
Case 4 - Kingpost Positioner	1 @ 22 1/2" x 22 1/2" x 23" / 120 lbs (54.5 kg)
Total Packaged Weight (less feed options)	536 lbs (244 kg)
Feeds - C / X / Ku - Pack individually	Typical RF Case 24" x 20" x 12" / 30 lbs (13.6 kg) Each
Integrated Feeds with Booms - Optional 1 Case / Band	Specify CFE BUC / Packs in 1 Case Per Band
Temperature	
Operational	-40 to 60°C (-40 to 140°F)
Survival	-50 to 70°C (-58 to 158°F)
Pointing Loss (operational winds)**	3.5 dB peak (Ku-band Rx)
Winds	
Operational	30 Gusting to 45 mph (40 kph G 72 kph) with ballast or anchors
Survival	60 mph (96 kph) fully anchored / any position
Feedboom Mounted Integration***	85 lbs (38.6 kg)
Rain	
Operational	2 in/h (5 cm/h)
Survival	4 in/h (10 cm/h)
Relative Humidity	0 - 100% (condensing)
Solar Radiation	360 btu/h/ft ² (1000 Kcal/h/m ²)
Radial Ice (survival)	1/2 in (12.7 mm)
Corrosive Atmosphere	As encountered in coastal and/or industrial areas

Note: Specifications subject to change without notice

- * Feed packaged separately dependent on options ordered
- ** Performance dependent on proper installation and ballast/anchors
- *** Dependent on position of weight. Consult Engineering for details