## 1033 Celero

## 1.0 Meter Motorized Flyaway Antenna



The Sat-Lite Technologies Model 1033 Celero motorized flyaway antenna is highly portable, light-weight, and can be assembled by one person in less than 15 minutes. The antenna features a 4 piece segmented glass fiber reinforced reflector with compact pedestal and is designed to be value priced while providing exceptional performance. The motorized 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 / all-weather shipping cases. The controller is also packaged in an all-weather housing and mounts externally on the antenna and uses quick connect cabling. Multiple Feed configurations are available that include X Band, Ku Band, and Ka Band.





Electrical	2 Port X Band		2 Port Cross Pol Ku Band		2 Port Cross Pol Ka Band	
Considerations	Circular		Linear / Standard Feed		Circular Polarization	
Specifications	Rx	Tx	Rx	Tx	Rx	Tx
Frequency (GHz)	7.25 - 7.75	7.9 - 8.4	10.70 - 12.75	13.75 - 14.5	18.3 - 20.2	28.3 - 30.0
Gain (Midband, dBi)	35.6	36.2	39.7	41.2	44.0	47.5
Noise Temperature (°K)						
10 deg El	80		69		135	
20 deg El	65		59		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	-21.3 dB	-24.8 dB
in 1 dB Contour	-21.3 dB	-21.3 dB	-27 dB	-27 dB	-21.3 dB	-24.8 dB
Sidelobes		Meets DSCS		ITU 580		ITU 580
VSWR	1.30:1	1.30:1	1.35:1	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
Rx/Tx	0 dBm input	-110 dB	0 dBm input	-40 dB	0 dBm input	-80 dB

Note: Specifications subject to change without notice

## **TECHNICAL SPECIFICATIONS**



Mechanical / Environmental Specifications					
Reflector	98 cm (39 in) GFRP				
Reflector Configuration	4 Piece Segmented Single Offset				
Antenna Travel					
Azimuth	360° continuous with fine adjust				
Elevation	5 - 90° of reflector bore sight				
Polarization	$\pm90^\circ$				
Packaging (Compression Molded - All Weather)					
Reflector / Backbeam Case	37.5" x 27.5" x 14.5" (92 lbs)				
Motorized Positioner / Controller Case	14" x 19.5" x 24" (55 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 G72 kph)				
Survival (tied down, any position)	60 mph (96 kph)				
Survival (tied down, stowed >85 deg el.)	80 mph (128 kph)				
BUC Integration					
BUC Mount - Direct to Feed	3.3 lbs (1.5 kg)				
BUC Mount - Boom Mount / Flex WG	22 lbs (10 kg)				
BUC Mount - Az Base Mount / Flex WG	44 lbs (20 kg)				

Controller Electrical Interface				
Input Power:	100 - 240 VAC, 1 Phase, 50/60 Hz, 500 W			
Temperature:	Operational: -30° to +60° C			
	Survival: -40° to +70° C			
Outdoor Unit Size:	8.75" (222) x 12" (305) x 3" (76 mm)			
Weight	8 lbs (3.6 Kg)			
Display	GUI Interface via Ethernet – Web Browser via Laptop, Tablet or PDA			
Operation	Push Button – Auto Locate / Pack Up Configuration			
	Jog / Auto Locate / Program – Via Ethernet			
Antenna Configurations	Sat-Lite Technologies Preconnectorized Flyaway Terminal			
	3 Axis Control, Drives Azimuth, Elevation, Polarization Axes (DC Motors)			
RF Input	L Band from LNB (controller does not power LNB)			
DVB Receiver	DVBS-2, Based on Frequency, Polarization, Symbol Rate, FEC, Modulation			
User Interface Requirements	AC Input Power (Power Cord Supplied), Ethernet (RJ 45)			
	Rx Input from LNB Via Type F(f) (L - Band)			