

# 1023 Celero

## 1.0 Meter Manual Flyaway Antenna



The Sat-Lite Technologies Model 1023 Celero 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 glass fiber reinforced reflector with compact pedestal and is designed to be value priced while providing exceptional performance. 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 1 ruggedized / all-weather shipping case. Multiple Feed configurations are available.

<b>Mechanical / Environmental Specifications</b>	
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	± 90°
Packaging (1 Case)	37.5" x 27.5" x 14.5" (100 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)
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)



<b>Electrical Specifications</b>	<b>2 Port X Band Circular</b>		<b>2 Port Cross Pol Ku Band Linear / Standard Feed</b>		<b>2 Port Cross Pol Ka Band Circular Polarization</b>	
	<b>Rx</b>	<b>Tx</b>	<b>Rx</b>	<b>Tx</b>	<b>Rx</b>	<b>Tx</b>
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	-30 dB	-30 dB	-21.3 dB	-24.8 dB
in 1 dB Contour	-21.3 dB	-21.3 dB	-30 dB	-30 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