

MODEL 828 & 838 Avion

80 cm Manual & Motorized Flyaway Antennas



- ***Ships in 1 Ruggedized All Weather IATA Compliant Case***
- ***Intelsat and Eutelsat Compliant***
- ***Multi-Band Configurations***
- ***6 Segment Carbon Fiber Precision Reflector***
- ***Compact Pedestal featuring easy point and peak control***
- ***High Gain / Low Cross Pol Design***
- ***Motorized Compact Controller using DVB Receiver or Modem for Automatic Acquisition***

The Sat-Lite Technologies Model 828 and 838 Avion manual and motorized flyaway antennas are highly portable and designed to meet IATA weight and dimension requirements for checked baggage. The antennas feature a 6 piece segmented carbon fiber composite reflector. Assembly time is less than 15 minutes. The elevation-over-azimuth pedestal provides excellent stiffness characteristics and convenience for the user when pointing and peaking on a satellite. The antennas are designed to meet international performance specifications for multiple applications. X, Ku, and Ka Band feed and packaging configurations are available.



Electrical Specifications	2 Port X Band Circular		2 Port Cross Pol Ku Band Linear		2 Port Cross Pol Ka Band Circular Polarization	
	Rx	Tx	Rx	Tx	Rx	Tx
Frequency (GHz)	7.25 - 7.75	7.9 - 8.4	10.95 - 12.75	13.75 - 14.5	19.2 - 21.2	29.0 - 31.0
Gain (Midband, dBi) (80 cm)	33.5	34.3	37.7	39.2	42.0	45.2
Typ. Noise Temperature (°K)						
10 deg El	80		79		155	
20 deg El	72		70		120	
Axial Ratio	1.21 dB	2.0 dB			1.5 dB	1.0 dB
Cross Pol (std)						
On Axis	-23 dB	-18.7 dB	-35 dB	-35 dB	-21.3 dB	-24.8 dB
in 1 dB BW	-23 dB	-18.7 dB	-35 dB	-35 dB	-21.3 dB	-24.8 dB
Sidelobe Compliances	188-164A		ITU 580-6		188-164A	
VSWR	1.30:1	1.30:1	1.30:1	1.30:1	1.30:1	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	-35 dB	0 dBm input	-70 dB

Mechanical / Environmental Specifications	
Reflector	80 cm Carbon Fiber
Reflector Configuration	80 cm - 6 Piece
Antenna Travel	
Azimuth	+/-180° continuous with fine adjust
Elevation	5 - 90° of reflector bore sight
Polarization	± 90°
Packaging (Pelican Air 1637)	26.6"x 20.6"x 14.9" (67.6 x 52.5 x 37.8 cm)
Weight (less BUC and Satfinder)	
Models 828 - 80 cm	36 lbs (16.4 kg)
Models 838 - 80 cm (with controller)	47 lbs (21.4 kg)
Backpack option	available
Autolocate Controller	24 VDC Input Power (100 W)
	Locates on DVB or interfaces to CFE Modem
	Includes built in GPS and Compass
Temperature	
Operational	-30 to 60°C (-22 - 140°F)
Survival	-40 to 70°C (-40 - 158°F)
Winds	
Operational (anchored)	30 mph Gusting to 40 mph (48 kph G 64 kph)
Survival (anchored, petals removed)	75 mph