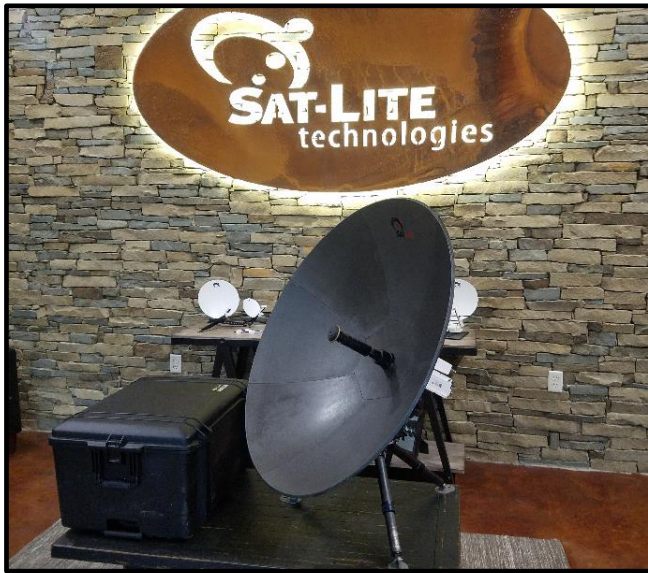


MODEL 828 & 1028 Avion

80 cm Manual Flyaway Antenna



The Sat-Lite Technologies Model 828 and 1028 Avion manual flyaway antennas are highly portable and designed to meet IATA weight and dimension requirements for checked baggage. The antennas feature a 6 or 8 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.



| Mechanical / Environmental Specifications | |
|--------------------------------------------------|---------------------------------------------|
| Reflector | 80 cm Carbon Fiber |
| Reflector Configuration | 80 cm - 6 Piece, - 8 Piece Symmetrical |
| Antenna Travel | |
| Azimuth | +/-180° continuous with fine adjust |
| Elevation | 5 - 90° of reflector bore sight |
| Polarization | ± 90° |
| Packaging (Soft / Backpack Optional) | 1 Case - Includes Ku or Ka Feed |
| Case (Compression Molded, Ku Config) | 26.5" x 20.5" x 15" (36 lb / 16.4 Kg) |
| Backpack option | 4 Pounds (fits in Case) |
| Temperature | |
| Operational | -30 to 60°C (-22 - 140°F) |
| Survival | -40 to 70°C (-40 - 158°F) |
| Winds | |
| Operational (tied down) | 30 mph Gusting to 40 mph (48 kph G 64 kph) |
| Survival (tied down, any position) | 60 mph |

| 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 |