

1021 AGILIS

1.0 Meter Carbon Fiber Flyaway Antenna



- ***Intelsat and Eutelsat Compliant (with Appropriate Feed)***
- ***Multi-Band X, Ku or Ka band Capable***
- ***7 Piece Segmented Carbon Fiber Reflector***
- ***Compact Pedestal featuring easy point and peak control***
- ***Ships in 2 Ruggedized Cases Airline Checkable (each less than 24 Kg)***
- ***High Gain / Low Cross Pol Design***
- ***Multiple Integration Options***
- ***Excellent Reliability***
- ***Minimal Maintenance***

The Sat-Lite Technologies Model 1021 flyaway antenna is highly portable, compact, light-weight, and can be assembled by one person in less than 15 minutes. The antenna features a 7 piece segmented carbon fiber composite reflector designed to provide exceptional performance in a lightweight package. 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 2 weatherized compression molded cases that meet the 62 inch rule for airline travel and are less than 24 Kg each.

In addition, the antenna is designed to meet international performance specifications for commercial or military applications and is readily available in X, Ku and/or Ka band frequencies. Multiple feed configurations and paint schemes are readily available.



TECHNICAL SPECIFICATIONS



| <i>Electrical Specifications</i> | 2 Port X Band Circular | | 2 Port Cross Pol Ku Band Linear / Standard Feed | | 2 Port Cross Pol Ku Band Linear / Mode Matched Feed | | 2 Port Cross Pol Ka Band Circular Polarization | |
|----------------------------------|------------------------|-------------|---|--------------|---|--------------|--|-------------|
| | Rx | Tx | Rx | Tx | Rx | Tx | Rx | Tx |
| Frequency (GHz) | 7.25 - 7.75 | 7.9 - 8.4 | 10.70 - 12.75 | 13.75 - 14.5 | 10.95 - 12.75 | 13.75 - 14.5 | 20.2 - 21.2 | 30.0 - 31.0 |
| Gain (Midband, dBi) | 35.7 | 36.3 | 39.8 | 41.6 | 39.8 | 41.6 | 44.4 | 47.7 |
| Noise Temperature (°K) | | | | | | | | |
| 10 deg El | 80 | | 69 | | 66 | | 153 | |
| 20 deg El | 65 | | 59 | | 58 | | 102 | |
| Axial Ratio | 1.5 dB | 1.5 dB | | | | | | |
| (low Axial Ratio Version) | 0.5 dB | 0.5 dB | | | | | 1.5 dB | 1.0 dB |
| Cross Pol (std) | | | | | | | | |
| On Axis | -21.3 dB | -21.3 dB | -35 dB | -35 dB | -35 dB | -35 dB | -21.3 dB | -24.8 dB |
| in 1 dB BW | -21.3 dB | -21.3 dB | -27 dB | -27 dB | -25 dB | -35 dB | -21.3 dB | -24.8 dB |
| Sidelobe Compliances | Meets DSCS | | Meets ITU 580 FCC | | ITU 580 Eutelsat | | Meets ITU 580 | |
| VSWR | 1.30:1 | 1.30:1 | 1.35:1 | 1.30:1 | 1.50:1 | 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 | -85 dB | 0 dBm input |
| Rx/Tx | 0 dBm input | -110 dB | 0 dBm input | -30 dB | 0 dBm input | -30 dB | 0 dBm input | -30 dB |

| <i>Mechanical / Environmental Specifications</i> | |
|--|---|
| Reflector | 100 cm (39.4 in) Carbon Fiber |
| Reflector Configuration | 7 Piece Segmented Single Offset |
| Antenna Travel | |
| Azimuth | +/-180° continuous with fine adjust |
| Elevation | 5 - 90° of reflector bore sight |
| Polarization | ± 90° |
| Packaging (2 Cases) | |
| Pedestal Case (Compression Molded / Outdoor) | 25.6" x19.5" x 15.6" (22 Kg) |
| Reflector Case (Compression Molded / Outdoor) | 24.9" x23.7" x 13.1" (24 Kg) |
| 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 |
| Survival (tied down, stowed above 85 deg el.) | 70 mph |
| Integration | |
| Feedboom Mounted ¹ | 25 lbs |
| Rain | |
| Operational | 4 in/h (10 cm/h) |
| Survival | 6 in/h (15 cm/h) |
| Relative Humidity | 0 - 100% |
| Solar Radiation | 360 btu/h/ft ² (1000 Kcal/h/m ²) |
| Radial Ice (survival) | 1 in (25.4 mm) |
| Corrosive Atmosphere | As encountered in coastal and/or industrial areas |

¹ Dependent on mounting position relative to elevation axis
 Note: Specifications subject to change without notice