

SML 120FA

1.2m Flyaway Antenna



The Satmission SMP 120FA is a manual flyaway antenna is highly portable and designed to meet IATA weight and dimension requirements for checked baggage on airlines. The antenna features a unique 7-piece segmented carbon fiber composite reflector designed for unmatched performance. Assembly time for either antenna 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.

In addition, the antenna is designed to meet international performance specifications for multiple applications.

Multiple feed and packaging configurations can be supplied for a specific requirement that include low and high power amplifier configurations for each frequency band.



- Ships in 2 Ruggedized All Weather IATA Compliant Cases
- Intelsat and Eutelsat Compliant
- Multi-Band Capable
- 7 Piece Segmented Carbon Fiber Precision Reflector
- Compact Pedestal featuring easy point and peak control
- High Gain / Low Cross Pol Design
- Multiple Integration Options
- Excellent Reliability with Minimal Maintenance

Technical Specifications

<i>Electrical Specifications</i>	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
	Frequency (GHz)	10.70 - 12.75	13.75 - 14.5	10.95 - 12.75	13.75 - 14.5	19.2 - 21.2
Gain (Midband, dBi)	41.6	43.4	41.6	43.4	46.0	49.2
Typ. Noise Temperature (°K)						
10 deg El	69		66		153	
20 deg El	59		58		102	
Axial Ratio (low Axial Ratio Version)					2.0 dB	1.0 dB
Cross Pol (std)						
On Axis	-35 dB	-35 dB	-35 dB	-35 dB	-18.7 dB	-24.8 dB
in 1 dB BW	-27 dB	-27 dB	-25 dB	-35 dB	-18.7 dB	-24.8 dB
Sidelobe Compliances	Meets ITU 580 FCC		ITU 580 Eutelsat		Meets ITU 580	
VSWR	1.35:1	1.30:1	1.50:1	1.30:1	1.35:1	1.30:1
Isolation						
Tx/Rx	-85 dB	0 dBm input	-85 dB	0 dBm input	-85 dB	0 dBm input
Rx/Tx	0 dBm input	-35 dB	0 dBm input	-35 dB	0 dBm input	-30 dB

<i>Mechanical / Environmental Specifications</i>	
Reflector	127 cm Carbon Fiber
Reflector Configuration	7 Piece Proprietary Single Offset
Antenna Travel	
Azimuth	+/-180° continuous with fine adjust
Elevation	5 - 90° of reflector bore sight
Polarization	± 90°
Packaging	
Pedestal Case (Roto Molded)	66 cm x 48 cm x 42 cm (29 Kg)
Reflector Case (Compression Molded)	63,2 cm x 60,2 cm x 33,3 cm (19 Kg)
Temperature	
Operational	-30 to 60°C
Survival	-40 to 70°C
Winds	
Operational	48 kph Gusting to 72 kph
Survival (tied down, any position)	97 kph
Integration	
Base Mounted BUCs	Packs Separately
Feed Mounted BUCs	Typical Small BUCs < 16 Watts Ku
Rain	
Operational	10 cm/h
Survival	15 cm/h
Relative Humidity	0 - 100%
Solar Radiation	1000 Kcal/h/m ²
Radial Ice (survival)	25.4 mm
Corrosive Atmosphere	As encountered in coastal and/or industrial areas

Note: Specifications subject to change without notice

* Consult Engineering for details

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