



satmission
LIVE NOW

SMV 120FA

1.2 m Flyaway Antenna

Satmission Model SMV 120FA flyaway antenna is highly portable, compact, light-weight, and can be assembled by one person in less than 15 minutes.

The antenna features a 2 or 4 piece segmented glass fiber reinforced reflector with compact pedestal and is designed to be value priced while providing 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 ruggedized shipping cases.

In addition, the antenna is designed to meet International performance specifications for commercial or military applications.

The antenna can be upgraded to use the RC300 Flyaway Companion which aids the user in pointing and peaking the antenna on the satellite.

Multiple feed configurations and paint schemes are also readily available.



- Intelsat Compliant
- Multi-Band Capable
- Multiple Integration Options
- Compact Packaging
- Superior Stability
- Excellent Reliability
- Minimal Maintenance
- Less than 15 min Assembly Time
- Captive Hardware
- RC300 Satellite Companion option

Technical Specifications

Electrical Specifications	2 Port C Band Linear Feed		2 Port C Band Circular Feed		2 Port C Band (Insat) Linear Feed		2 Port X Band Circular		2 Port Cross Pol Ku Band Linear / Standard Feed	
	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx	Rx	Tx
Frequency (GHz)	3.625 - 4.20	5.85 - 6.425	3.625 - 4.20	5.85 - 6.425	4.5 - 4.8	6.725 - 7.025	7.25 - 7.75	7.9 - 8.4	10.70 - 12.75	13.75 - 14.5
Gain (Midband, dBi)	31.9	35.9	31.9	35.9	33.6	37	37.2	37.8	41.7	43.2
Noise Temperature (K)										
10 deg El	45		54		48		79		45	
20 deg El	40		47		42		61		31	
Axial Ratio			3.0 dB	2.3 dB			1.5 dB	1.5 dB		
Cross Pol										
On Axis	-30 dB	-30 dB	-15.3 dB	-17.5 dB	-30 dB	-30 dB	-21.3 dB	-21.3 dB	-30 dB	-30 dB
in 1 dB contour	-26 dB	-26 dB	-15.3 dB	-17.5 dB	-26 dB	-26 dB	-21.3 dB	-21.3 dB	-30 dB	-30 dB
Sidelobe Compliances	IESS 601 Std G		IESS 601 Std G		Meets ITU 580		Meets ITU 580		Meets ITU 580	
VSWR	1.50:1	1.30:1	1.50:1	1.30:1	1.30:1	1.30:1	1.30:1	1.30:1	1.50:1	1.30:1
Isolation										
Tx/Rx	-60 dB	0 dBm input	-60 dB	0 dBm input	-70 dB	0 dBm input	-110 dB	0 dBm input	-110 dB	0 dBm input
Rx/Tx	0 dBm input	-50 dB	0 dBm input	-50 dB	0 dBm input	-30 dB	0 dBm input	-110 dB	0 dBm input	-35 dB

Mechanical / Environmental Specifications

Reflector	1,2 meters Glass Fiber Reinforced Polyester
Reflector Configuration	2 or 4 Piece Segmented Single Offset
Antenna Travel	
Azimuth	360° continuous with fine adjust
Elevation	0 - 90° of reflector bore sight
Polarization	± 90°
Packaging (2 Cases)	
Pedestal Case (Pelican Style)	95,3 cm x 69,9 cm x 36,8 cm (45,4 kg)
Reflector Case	76,2 cm x 68,6 cm x 43,2 cm (36,3 kg) - 4 Piece Option 129,5 cm x 80 cm x 34,3 cm (34 kg) - 2 Piece Option
Temperature	
Operational	-22 - 140°F
Survival	-40 to 70°C
Winds	
Operational	48 kph Gusting to 72 kph
Survival (tied down, any position)	97 kph
Survival (tied down, stowed above 85 deg el.)	128 kph
Integration	
Feedboom Mounted	13,6 kg
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

1 Dependent on mounting position relative to elevation axis

Satmission AB
 Bultenvägen 5
 S-95261 Kalix, Sweden
 Phone: +46 923 137 10
 E-mail: sales@satmission.com
 Web: www.satmission.com