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
## Electrical Specifications

<table>
<thead>
<tr>
<th>2 Port C Band</th>
<th>2 Port C Band</th>
<th>2 Port C Band (Insat)</th>
<th>2 Port X Band</th>
<th>2 Port Cross Pol Ku Band</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Linear Feed</td>
<td>Circular Feed</td>
<td>Linear Feed</td>
<td>Circular</td>
</tr>
<tr>
<td></td>
<td>Rx</td>
<td>Tx</td>
<td>Rx</td>
<td>Tx</td>
</tr>
<tr>
<td>Frequency (GHz)</td>
<td>3.625 - 4.20</td>
<td>5.85 - 6.425</td>
<td>4.5 - 4.8</td>
<td>6.725 - 7.025</td>
</tr>
<tr>
<td>Gain (Midband, dB)</td>
<td>31.9</td>
<td>35.9</td>
<td>33.6</td>
<td>37</td>
</tr>
<tr>
<td>Noise Temperature(°K)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 deg El</td>
<td>45</td>
<td>54</td>
<td>48</td>
<td>79</td>
</tr>
<tr>
<td>20 deg El</td>
<td>40</td>
<td>47</td>
<td>42</td>
<td>61</td>
</tr>
<tr>
<td>Axial Ratio</td>
<td>-30 dB</td>
<td>-30 dB</td>
<td>-15.3 dB</td>
<td>-17.5 dB</td>
</tr>
<tr>
<td></td>
<td>-26 dB</td>
<td>-26 dB</td>
<td>-15.3 dB</td>
<td>-17.5 dB</td>
</tr>
<tr>
<td></td>
<td>-15 dB</td>
<td>-15 dB</td>
<td>-70 dB</td>
<td>-50 dB</td>
</tr>
<tr>
<td>VSWR</td>
<td>1.50:1</td>
<td>1.30:1</td>
<td>1.30:1</td>
<td>1.30:1</td>
</tr>
<tr>
<td>Tx/Rx</td>
<td>-60 dB</td>
<td>0 dBm input</td>
<td>-70 dB</td>
<td>0 dBm input</td>
</tr>
<tr>
<td>Rx/Tx</td>
<td>0 dBm input</td>
<td>-50 dB</td>
<td>0 dBm input</td>
<td>-50 dB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-35 dB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Mechanical / Environmental Specifications

- **Reflector**: 1.2 meters Glass Fiber Reinforced Polyester
- **Reflector Configuration**: 2 or 4 Piece Segmented Single Offset
- **Antenna Travel**: 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/m²
- **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