

# 1.8m Motorized Vehicle-Mount Antenna System



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*Your Trusted Source for  
Satellite Equipment*

- **Mobile VSAT, Roof Mounted Antenna**
- **Single-Button, Auto-Point Control System**
- **Three Axis Positioning**
- **Heavy Duty Feed Boom Supports up to 35 lbs**
- **C, Ku or X band Feed Options**

| Electrical Specifications      | 2 Port Cross-Pol C Band |                  | 2 Port Cross-Pol C Band |                      | 2 Port X Band        |                      | 2 Port Cross Pol-Ku Band |                      |
|--------------------------------|-------------------------|------------------|-------------------------|----------------------|----------------------|----------------------|--------------------------|----------------------|
|                                | Linear Feed             |                  | Circular Feed           |                      | Circular             |                      | Linear                   |                      |
|                                | Rx                      | Tx               | Rx                      | Tx                   | Rx                   | Tx                   | Rx                       | Tx                   |
| Frequency (GHz)                | 3.40 - 4.20             | 5.85 - 6.725     | 3.625 - 4.20            | 5.85 - 6.425         | 7.25 - 7.75          | 7.9 - 8.4            | 10.70 - 12.75            | 13.75 - 14.5         |
| Gain (Midband, dBi)            | 35.3                    | 39.3             | 35.4                    | 39.5                 | 41.3                 | 42.0                 | 45.3                     | 46.6                 |
| Noise Temperature (°K)         |                         |                  |                         |                      |                      |                      |                          |                      |
| 10 deg El                      | 41                      |                  | 41                      |                      | 60                   |                      | 55                       |                      |
| 20 deg El                      | 36                      |                  | 36                      |                      | 56                   |                      | 50                       |                      |
| Axial Ratio                    |                         |                  | 3.0 dB                  | 2.3 dB               | 1.5 dB               | 1.5 dB               |                          |                      |
| Cross Pol (On Axis) in 1 dB BW | -30 dB<br>-23 dB        | -30 dB<br>-23 dB | -15.3 dB<br>-15.3 dB    | -17.5 dB<br>-17.5 dB | -21.3 dB<br>-21.3 dB | -21.3 dB<br>-21.3 dB | -30.0 dB<br>-23.0 dB     | -30.0 dB<br>-23.0 dB |
| Sidelobe Compliance            | IESS 207                |                  | IESS 207                |                      |                      | Meets DSCS           |                          | Meets ITU 580        |
| VSWR                           | 1.50:1                  | 1.30:1           | 1.50:1                  | 1.30:1               | 1.30:1               | 1.30:1               | 1.50:1                   | 1.30:1               |

| Mechanical Specifications |  |
|---------------------------|--|
| Reflector                 | 1.8 meters (70.87 in) - SMC  |
| Reflector Offset Angle    | 22.6°  |
| Antenna Travel            |  |
| Azimuth                   | ± 200°   |
| Elevation                 | 0 - 90° of reflector boresight   |
| Polarization              | ± 90°  |
| Antenna Drive Rate        |  |
| Azimuth                   | 1.5°/sec   |
| Elevation                 | 1.5°/sec   |
| Polarization              | 2°/sec   |
| Antenna Stowed Dimensions | Length: 98.5" (2501mm) Width: 72" (1829 mm) Height: 18" (457 mm)<br>[add 3 inches to height (76mm) for optional mount frame] |
| Weight                    | 275 lb (125 kg) - without integration  |
| Integration               |  |
| Feedboom Mounted          | 35 lbs (15.9 kg)   |
| Positioner Mounted        | 250 lbs (113 kg)   |

| Environmental Specifications      |  |
|-----------------------------------|--|
| Temperature                       |  |
| Operational                       | -20 to 60°C (-4 to 140°F)                                |
| Survival                          | -40 to 70°C (-40 to 158°F)                               |
| Pointing Loss (operational winds) | 2 dB (Ku-band Rx)  |
| Winds                             |  |
| Operational                       | 35 mph Gusting to 50 mph (56 kph G 81 kph)               |
| Survival                          | 70 mph (112 kph) any position<br>90 mph (145 kph) stowed |

MVSAT\_VS-180MVSAT\_VSAT-SNG\_MOT\_REV004  
Specifications are subject to change without notice

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