

1.5 Meter Vehicle-Mount SNG Antenna



Features

- Intelsat and Eutelsat
- Compliant
- Multi-Band C, X, Ku or Ka band Capable
- Integrated Controller with Tracking Options Available
- Carbon Fiber Reinforced Polymer Structure – Lightweight and Stiff
- Low Profile and Space-Optimizing Stowed Configuration
- High Gain / Low Cross Pol Design
- Superior Stability in Wind
- Multiple Integration Options
- Excellent Reliability
- Minimal Maintenance

Overview

The 1.5 Meter Vehicle-Mount SNG Antenna from Advantech Wireless offers the most robust and light-weight antenna of its type and size available. This antenna features a carbon fiber composite reflector and backbeam structure designed to provide exceptional performance in a lightweight package. The custom designed elevation-over-azimuth pedestal provides superior stiffness for excellent performance in the most demanding environments. The unique 1.5 meter antenna geometry allows for compact stowing utilizing less vehicle space than most 1.2 meter mobile antennas.

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

1.45 Meter Vehicle-Mount Antenna

| Technical Specifications | | | | | | | | | | | |
|---------------------------|------------------------------|--------------|--------------------------------|--------------|---------------------------|-------------|--|--------------|---|--------------|--|
| Electrical specifications | | | | | | | | | | | |
| | 2 Port C Band Linear Feed | | 2 Port C Band Circular Feed | | 2 Port X Band Circular | | 2 Port Cross Pol Ku Band Linear / Standard Feed | | 2 Port Cross Pol Ku Band Linear / Mode Matched 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 | 7.25 - 7.75 | 7.9 - 8.4 | 10.70 - 12.75 | 13.75 - 14.5 | 10.95 - 12.75 | 13.75 - 14.5 | |
| Gain (Midband, dBi) | 33.4 | 37.2 | 33.3 | 37.1 | 39 | 39.6 | 43.4 | 45.0 | 43.4 | 45.2 | |
| Noise Temperature (°K) | | | | | | | | | | | |
| 10 deg El | 45 | | 54 | | 79 | | 70 | | 65 | | |
| 20 deg El | 40 | | 47 | | 61 | | 60 | | 58 | | |
| 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 | -21.3 dB | -21.3 dB | -35 dB | -35 dB | -35 dB | -35 dB | |
| in 1 dB BW | -26 dB | -26 dB | -15.3 dB | -17.5 dB | -21.3 dB | -21.3 dB | -27 dB | -27 dB | -25 dB | -35 dB | |
| Sidelobe Compliances | IESS 601 Std G | | IESS 601 Std G | | Meets DSCS | | Meets ITU 580 FCC | | Meets ITU 580 FCC | | |
| VSWR | 1.30:1 | 1.30:1 | 1.30:1 | 1.30:1 | 1.30:1 | 1.30:1 | 1.35:1 | 1.30:1 | 1.50:1 | 1.30:1 | |
| Isolation | | | | | | | | | | | |
| Tx/Rx | -70 dB | 0 dBm input | -60 dB | 0 dBm input | -110 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 | -110 dB | 0 dBm input | -30 dB | 0 dBm input | -30 dB | |

| Mechanical / Environmental Specifications | |
|---|---|
| Reflector | 1.5 meters (58.75 in) Carbon Fiber Reinforced Polymer |
| Reflector Configuration | Parabolic Single Offset, 0.78 F/D (16.9 deg offset) |
| Antenna Travel | |
| Azimuth | ± 200° continuous |
| Elevation | 0 - 90° of reflector bore sight |
| Polarization | ± 90° |
| Antenna Drive Rate | |
| Azimuth | 4.0°/sec |
| Elevation | 3.0°/sec |
| Polarization | 3.0°/sec |
| Temperature | |
| Operational | -30 to 60°C (-22 - 140°F) |
| Survival | -40 to 70°C (-40 - 158°F) |
| Pointing Loss (operational winds) | 2 dB Peak (Ku-band Rx) |
| Winds ¹ | |
| Operational | 45 mph Gusting to 60 mph (72 kph G 96 kph) |
| Survival | 80 mph (128 kph) any position 100 mph (161 kph) stowed |
| Antenna Stow Height | 17 in (432 mm) |
| Weight | 175 lb (79.5 kg) - with Ku Feed |
| Integration ² | |
| Feedboom Mounted ³ | 70 lbs |
| Positioner Mounted (Saddle Bag Option) | 250 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 vehicle capabilities
² Dependent on mounting position relative to elevation axis
³ Std weight shown, consult factory for special requirements

Ref.: PB-VMA-SNG-1.5M-19026

NORTH AMERICA

USA
info.usa@advantechwireless.com

CANADA
Info.canada@advantechwireless.com

EUROPE

UNITED KINGDOM
info.uk@advantechwireless.com

RUSSIA & CIS
info.russia@advantechwireless.com

SOUTH AMERICA

info.latam@advantechwireless.com

BRAZIL
info.brazil@advantechwireless.com

ASIA

info.asia@advantechwireless.com

INDIA
info.india@advantechwireless.com