

**Antenna Development Corporation**  
**151 S. Walnut St., Suite B-6, Las Cruces, NM 88001**

**Medium Gain X-band Antennas**

Antenna Development Corporation, Inc. (AntDevCo) has designed and developed X-band medium gain spacecraft microstrip patch antennas. These antennas are capable of supporting high data rates and up to an estimated 25 Watts of transmitted power.

This single-frequency unit operates in the NASA Deep Space Network frequency of about 8000 MHz – other, custom, frequencies are available.

The antennas options include LHCP, RHCP, or linear polarizations. All antennas include extensive testing data including principal plane radiation pattern plots, gain bounds plots, and coverage statistics.

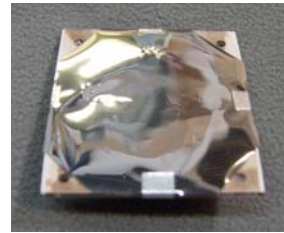
Simulations of the expected performance of the antenna on your satellite can also be ordered.

- Space qualified by similarity
- Conformal form factor
- Low mass

Two versions are available – a 11 dB gain unit and a 16.5 dB gain unit..



16 dB gain antenna



11 dB gain antenna

**Performance – 16 dB Gain Unit**

- Gain: 16.5 dB nominal
- HPBW: 16 X 30 degrees full width (Example at ~ 8100 MHz)
- Impedance: 50 Ohms
- Axial Ratio: < 2 dB on axis
- Connector: SMA Female
- Dimensions: 4.1” X 5.9” X 0.25”
- Mass: ~ 300 grams

**Performance – 11 dB Gain Unit**

- Gain: 11 dB nominal
- HPBW: 50 degrees full width
- Impedance: 50 Ohms
- Axial Ratio: < 4 dB on axis
- Connector: SMA Female
- Dimensions: 2.7” X 2.5” X 0.315” nominal
- Mass: < 53 grams

Common Characteristics

- VSWR: < 1.5
- Polarization: Options: Linear or Circular
- Bandwidth: > 100 MHz
- Temperature: -40 C to +70 C
- Power: up to 10 Watts CW (estimated)
- IR properties Depends on radome option

*Please call or message for more information.*

AntDevCo is ISO 9001-2008 certified

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**Precision Antennas for Spacecraft, Rockets, and Missiles**

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