

# PCS and WLAN Omni Antennas

## ANCC-15x Series

V4.00

### Features

- Light Weight - Slim Profile
- Patented Printed Circuit Technology
- Watertight Ultrasonic and O-Ring Sealed
- Groundplane Independent
- Stainless Steel Hardware
- Multiple pigtail lengths, radome colors and connector options available

### Description

M/A-COM's Omni antennas are vertically polarized collinear arrays utilizing a patented printed circuit technology for the radiating elements. These rugged antennas are housed in UV stable ultrasonically bonded polycarbonate radomes. Installation is easy due to the small footprint, mounting system, and our convenient pigtail connection. Our Omni antennas are groundplane independent and can be mounted in any direction. Mounting bracket included.



### Specifications

| Part No: ANCC-        | 151A           | 152A           | 153A           | 154A           | 155A           | 156A           |
|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Frequency (MHz)       | 1850-1990      | 1850-1990      | 1850-1990      | 2400-2500      | 2400-2500      | 2400-2500      |
| Peak Gain (dBi)       | 4.2 Typical    | 5.6 Typical    | 6.7 Typical    | 4.5 Typical    | 6.0 Typical    | 7.0 Typical    |
| Beamwidth - 3dB       | 40°            | 27°            | 22°            | 40°            | 27°            | 22°            |
| Polarization - Linear | Vertical       | Vertical       | Vertical       | Vertical       | Vertical       | Vertical       |
| Nominal Impedance     | 50 Ohm         | 50 Ohm         | 50 Ohm         | 50 Ohm         | 50 Ohm         | 50 Ohm         |
| VSWR                  | 2.0:1 Max      | 2.0:1 Max      | 2.0:1 Max      | 2.0:1 Max      | 2.0:1 Max      | 2.0:1 Max      |
| RF Power - Average    | 50 W           | 50 W           | 50 W           | 50 W           | 50 W           | 50 W           |
| Weight                | 3.9 oz         | 4.3 oz.        | 4.7 oz.        | 3.5 oz         | 3.9 oz         | 4.3 oz         |
| Length ± 0.125 in.    | 11.6           | 15.35          | 19.35          | 10.1           | 12.6           | 15.6           |
| Diameter ± 0.015 in.  | 0.75           | 0.75           | 0.75           | 0.75           | 0.75           | 0.75           |
| Temperature           | -40°C to +85°C | -40°C to +85°C | -40°C to +85°C | -40°C to +85°C | -40°C to +85°C | -40°C to +85°C |
| Pigtail (RG - 58/U)   | 12" N-Male     | 12" N-Male     | 12" N-Male     | 12" N-Male     | 12" N-Male     | 12" N-Male     |
| Color                 | Natural        | Natural        | Natural        | Natural        | Natural        | Natural        |

How to Order: Select the appropriate option from the table above, and add "-S-12-NM" to the part number. For example, to order a 6.7 dBi antenna for use at 1920 MHz, the part number will be ANCC-153A-S-12-NM.

Specifications Subject to Change Without Notice.

### M/A-COM, Inc.

North America: Tel. (800) 366-2266 ■ Asia/Pacific: Tel. +85 2 2111 8088 ■ Europe: Tel. +44 (1344) 869 595  
 Fax (800) 618-8883 Fax +85 2 2111 8087 Fax +44 (1344) 300 020

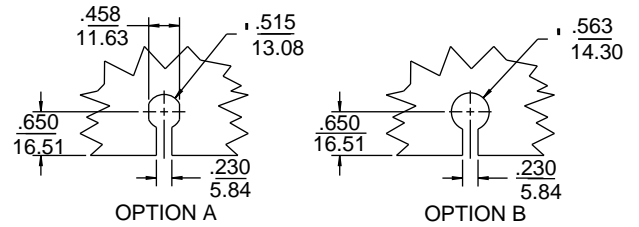
**Mounting Instructions:**

The antenna should be mounted free and clear of all surrounding structures. Mount the antenna and tighten all hardware.

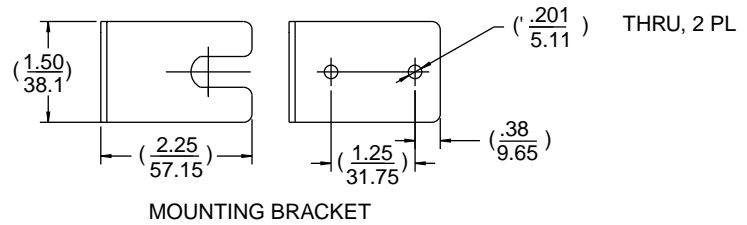
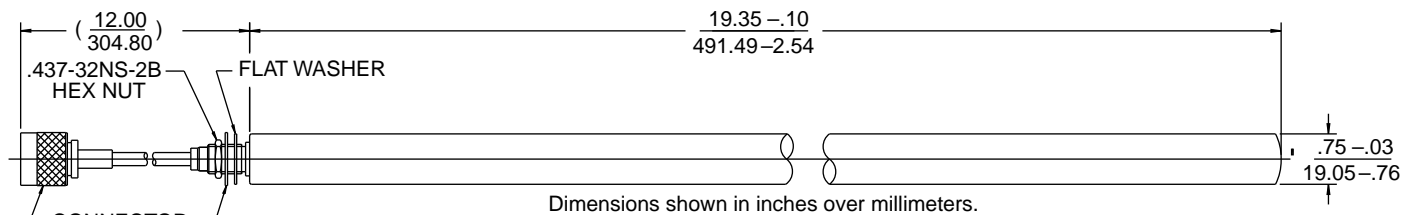
**Performance Note:**

The performance of the antenna is established by the local electrical environment. The performance listed in this datasheet was measured in free space without a groundplane or reflective material present. The suitability of this type of antenna should be established through testing and actual configuration of use.

**ANCC-153A**

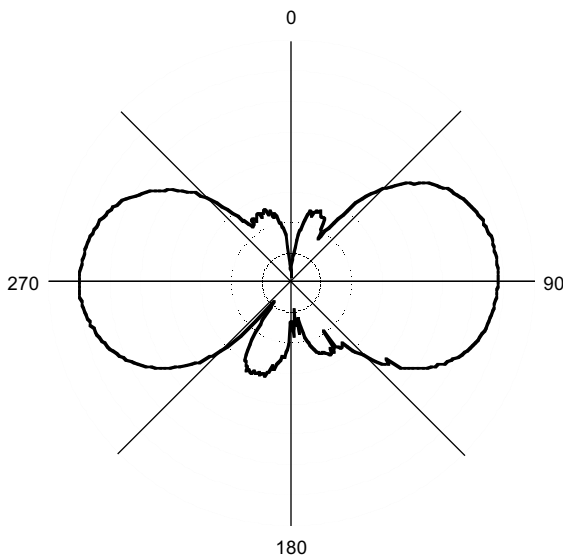


Required Mounting  
(without bracket)  
MIN MOUNTING PANE THICKNESS .06  
MAX MOUNTING THICKNESS .33



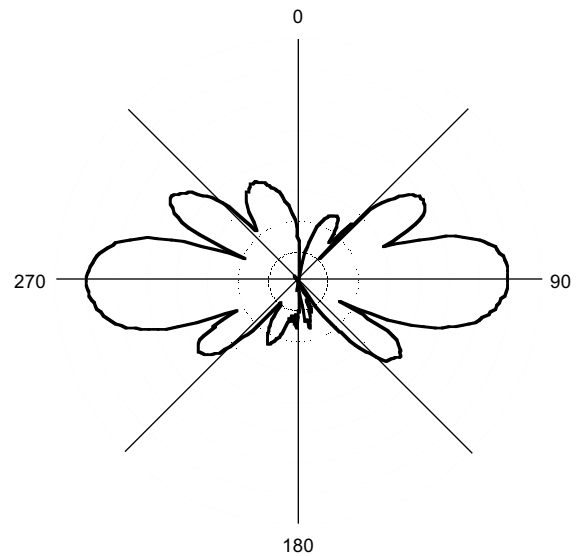
**Sample Elevation Plane Radiation Patterns**

**ANCC-151A at 1920 MHz**



Azimuth Plane is omnidirectional within ± 1.5 dB.

**ANCC-153A at 1920 MHz**



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