



# BMA-6-O

## Omni Directional Antenna with Cylindrical Radome

(120106019)



### > Applications

- UAVs
- Fixed Wing Aircraft
- Rotary Wing Aircraft

### > Benefits

- Low-Profile
- Use for Transmit or Receive
- Rugged
- Excellent Transmission Characteristics

### > Overview

The BMS Model BMA-6-O Omni-directional Antenna is mounted to the aircraft fuselage. This antenna is of collinear design, which means no ground plane is required. The antenna may be mounted on a nonmetallic surface. The antenna is protected with a radome which is transparent to the RF field generated by the antenna elements. The operating antenna is capable of withstanding airspeeds up to 300 mph. The 6 dBi Omni-directional antenna has an elevation coverage of 30°.

| RF Characteristics  |                   |
|---------------------|-------------------|
| Frequency Range     | 2.2 - 2.4 GHz     |
| Antenna Gain        | 6 dBi (+0.5/-0.0) |
| Polarization        | Vertical          |
| Elevation Beamwidth | 30°               |
| Azimuth Beamwidth   | 360°              |
| VSWR                | ≤ 1.6:1           |
| Input Power         | 20W Maximum       |

| Physical Characteristics |   |
|--------------------------|---|
| Antenna Radome           | G-10 Fiberglass<br>1.625" dia. x 10.70" long (4.13cm x 27.18cm)                                   |
| Mounting Flange          | Aluminum 6061-T6<br>2.75" dia. x .025" thick<br>(6.985cm x 0.635cm)                               |
| Weight                   | <1 lb. (<0.45 kg)   |
| Surface Finish           | Epoxy Primer, MIL-PRF-23377<br>Polyurethane Enamel, Polane S Plus<br>Color: Fed-Std-27925 (White) |

| Connector    |         |
|--------------|---------|
| RF Connector | SMA (f) |

| Environmental Characteristics |                                       |
|-------------------------------|---------------------------------------|
| Operating Temp.               | -65°C to +85°C                        |
| Vibration                     | 20g rms, 20 - 2,000 Hz                |
| Shock                         | 20 g, 11 ms pulse, Any Axis Half-Sine |
| Maximum Altitude              | 40,000 ft. AMSL                       |
| Wind Loading                  | 300 mph (480Km/h) Max.                |
| Mounting                      | Outside Aircraft                      |

