



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

Connector

RF Connector	SMA (f)
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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

