

PCTEL Carrier Grade VHF/UHF Omnidirectional Base Station Antennas

The BOA VHF/UHF omnidirectional base station antenna series consist of a linear array, encapsulated in a heavy duty fiberglass radome with a thick walled 6061-T6 aluminum mounting base for reliable long term use. The rugged design allows the BOA series to withstand harsh environments and is ideal for Industrial Wireless applications. The series is DC grounded and is UPS shippable.

Features

- UV Stable Light Gray Fiberglass Radome
- Hard-Coat Anodized Mounting Base
- Galvanized Mounting Hardware
- Removable Drain Plug for Upright or Inverted Mounting

RF/Electrical Specifications

| Model | Frequency Range | Nominal Gain | Return Loss | SWR | E-Plane Beamwidth |
|---------|-----------------|---------------|-------------|------|-------------------|
| BOA2175 | 215-225 MHz | 5 dBi/3 dBd | >10 dB | <2.0 | 18° |
| BOA2177 | 217-222 MHz | 7.1 dBi/5 dBd | >10 dB | <2.0 | 18° |
| BOA4409 | 440-460 MHz | 9.1 dBi/7 dBd | >12 dB | <1.7 | 11° |
| BOA4357 | 430-470MHz | 7.1 dBi/5 dBd | >12 dB | <1.7 | 18° |

Mechanical Specifications

| Model | Weight (Mass) | Height | Bending Moment at Rated Wind | Lateral Thrust at Rated Wind | Equivalent Flat Plate Area |
|---------|---------------|--------|------------------------------|------------------------------|----------------------------|
| BOA2175 | 10 lbs | 122" | 685 ft-lbs | 74 lbs | 1.7 ft ² |
| BOA2177 | 12 lbs | 151" | 965 ft-lbs | 88 lbs | 2.10 ft ² |
| BOA4409 | 12 lbs | 151" | 965 ft-lbs | 88 lbs | 2.10 ft ² |
| BOA4357 | 7.0 lbs | 83" | 250 ft-lbs | 45 lbs | 1.125 ft ² |



BOA4357 antenna (left); Bottom view (top right); BAM1005 mount (bottom left); MMK5 mount (bottom right)



Technical Data

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| Maximum Power: 250 watts |
| Nominal Impedance: 50 ohms |
| Radome Material: Pultruded Fiberglass (2" Outside Diameter) |
| ESD Protection: DC grounded |
| Rated Wind: 125 mph |
| Termination: N female bulkhead |
| Mounting Hardware: BAM1005 or MMK5 (Included) |