

PCTEL Heavy-Duty Omnidirectional Base Station Platform



The PCTEL BOA omnidirectional base station antennas consist of a linear array, encapsulated in a heavy-duty fiberglass radome with a thick-walled 6061-T6 aluminum mounting base. The rugged and robust design makes these antennas ideal for deployment in harsh environments where long term reliability and durability cannot be compromised. This platform is ideal for industrial wireless applications in the SCADA, Utility Smart Grid, Positive Train Control, Remote Monitoring, Precision Agriculture, and Military/Defense markets.

Features

- UV-stable gray fiberglass radome
- Versatile mounting brackets included
- Black, hard coat anodized finish on antenna base and mounting brackets
- Galvanized mounting hardware
- Movable drain plug for upright or inverted mounting
- DC grounded for ESD protection
- Stable pattern and gain performance with no field tuning required
- Temperature rang -40°C to +85°C



BOA9025 and BAM1005 mount



BOA2175 and MMK5 mount

STANDARD CONFIGURATION

Model	Connector	Mount
BOA9025	N Female bulkhead	BAM1005 mast mount included
BOA9028	N Female bulkhead	BAM1005 mast mount included
BOA90211	N Female bulkhead	MMK5 mast mount included
BOA4409	N Female bulkhead	MMK5 mast mount included
BOA4357	N Female bulkhead	BAM1005 mast mount included
BOA2177	N Female bulkhead	MMK5 mast mount included
BOA2175	N Female bulkhead	MMK5 mast mount included

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Elevation Half Power Beamwidth	Average Power	Nominal Impedance
BOA9025	902-928 MHz	5.1 dBi / 3 dBd	< 1.5	25°	250 watts	50 ohms
BOA9028	902-928 MHz	8.1 dBi / 6 dBd	< 1.5	13°	250 watts	50 ohms
BOA90211	902-928 MHz	11.1 dBi / 9 dBd	< 1.5	6°	250 watts	50 ohms
BOA4409	440-460 MHz	9.1 dBi / 7 dBd	< 1.7	11°	250 watts	50 ohms
BOA4357	430-470MHz	7.1 dBi / 5 dBd	< 1.7	18°	250 watts	50 ohms
BOA2177	217-222 MHz	7.1 dBi / 5 dBd	< 2.0	18°	250 watts	50 ohms
BOA2175	215-225 MHz	5 dBi / 3 dBd	< 2.0	18°	250 watts	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions	Weight	Housing Material	Rated Wind
BOA9025	2 OD x 55 in (5 x 139.7 cm)	5.0 lbs	Fiberglass	125 mph
BOA9028	2 OD x 68 in (5 x 172.7 cm)	6.0 lbs	Fiberglass	125 mph
BOA90211	2 OD x 122 in (5 x 309.9 cm)	10.0 lbs	Fiberglass	125 mph
BOA4409	2 OD x 151 in (5 x 383.5 cm)	12 lbs	Fiberglass	125 mph
BOA4357	2 OD x 83 in (5 x 210.8 cm)	7.0 lbs	Fiberglass	125 mph
BOA2177	2 OD x 151 in (5 x 383.5 cm)	12 lbs	Fiberglass	125 mph
BOA2175	2 OD x 122 in (5 x 309.8 cm)	10 lbs	Fiberglass	125 mph