PCTEL Heavy-Duty Omnidirectional Base Station Platform

The BOA omnidirectional base station antenna design utilizes a linear array, encapsulated in a heavy-duty fiberglass radome with a thick-walled mounting base for reliable, long term use. This rugged design withstands harsh environments, making the antennas ideal for Industrial Wireless and Military applications. The antennas in this series are DC grounded for ESD protection of radio components.

BOA24006NF

BOA24004NF

Features

- UV-stable, black fiberglass radome (0.625" diameter)
- Black chrome plated mounting base
- DC grounded design
- Fully sealed IP67 design
- Type N Male or Female connector options
- Wind rated 125 mph
- Temperature -40°C to +85°C

STANDARD CONFIGURATION

Model	Connector	Mount
BOA24004NF	N Female	BAM1009 or BAM1011-HCA mast mounts sold separately (all models)
BOA24006NF	N Female	
BOA24006NM	N Male	
BOA24008NF	N Female	
BOA24008NM	N Male	
BOA24008DT12NF	N Female	
BOA24008DT12NM	N Male	
BOA24008DT7NF	N Female	
BOA24008DT7NM	N Male	
BOA24010NF	N Female	
BOA51004NF	N Female	
BOA51004NM	N Male	
BOA58006NF	N Female	
BOA58006NM	N Male	
BOA58010NF	N Female	
BOA58010NM	N Male	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Nominal Gain	VSWR	Elevation Half Power Beamwidth	Maximum Power	Nominal Impedance
BOA24004NF	2.4-2.5 GHz	4 dBi	< 1.5:1	42°	40 watts	50 ohms
BOA24006NF	2.4-2.5 GHz	6 dBi	< 1.5:1	28°	40 watts	50 ohms
BOA24006NM	2.4-2.5 GHz	6 dBi	< 1.5:1	28°	40 watts	50 ohms
BOA24008NF	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24008NM	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24008DT12NF	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24008DT12NM	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24008DT7NF	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24008DT7NM	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24010NF	2.4-2.5 GHz	10 dBi	< 1.5:1	9°	40 watts	50 ohms
BOA51004NF	5.1-5.9 GHZ	4 dBi	< 1.5:1	42°	20 watts	50 ohms
BOA51004NM	5.1-5.9 GHZ	4 dBi	< 1.5:1	42°	20 watts	50 ohms
BOA58006NF	5.7-5.8 GHZ	6 dBi	< 1.5:1	28°	20 watts	50 ohms
BOA58006NM	5.7-5.8 GHZ	6 dBi	< 1.5:1	28°	20 watts	50 ohms
BOA58010NF	5.7-5.8 GHZ	10 dBi	< 1.5:1	10°	20 watts	50 ohms
BOA58010NM	5.7-5.8 GHZ	10 dBi	< 1.5:1	10°	20 watts	50 ohms

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MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions	Weight	Housing Material
BOA24004NF	.825 OD x 10.1 L in (2.09 x 25.65 cm)	0.33 lbs (151 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24006NF	.825 OD x 15.0 L in (2.09 x 38.1 cm)	0.38 lbs (176 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24006NM	.825 OD x 14.8 L in (2.09 x 37.5 cm)	0.30 lbs (134 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008NF	.825 OD x 19.4 L in (2.09 x 49.3 cm)	0.45 lbs (203 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008NM	.825 OD x 19.1 L in (2.09 x 48.5 cm)	0.35 lbs (161 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008DT12NF	.825 OD x 25.4 L in (2.09 x 64.5 cm)	0.52 lbs (235 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008DT12NM	.825 OD x 25 L in (2.09 x 63.5 cm)	0.40 lbs (182 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008DT7NF	.825 OD x 25.4 L in (2.09 x 64.5 cm)	0.52 lbs (235 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008DT7NM	.825 OD x 25 L in (2.09 x 63.5 cm)	0.42 lbs (192 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24010NF	.825 OD x 25.3 L in (2.09 x 64.4 cm)	0.52 lbs (235 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA51004NF	.825 OD x 5.5 L in (2.09 x 13.9 cm)	0.27 lbs (124 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA51004NM	.825 OD x 5.3 L in (2.09 x 13.5 cm)	0.18 lbs (82 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA58006NF	.825 OD x 7.29 in (2.09 x 18.5 cm)	0.30 lbs (134 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA58006NM	.825 OD x 7.03 L in (2.09 x 17.8 cm)	0.30 lbs (134 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA58010NF	.825 OD x 17.9 L in (2.09 x 45.5 cm)	0.43 lbs (194 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA58010NM	.825 OD x 17.6 L in (2.09 x 19.3 cm)	0.33 lbs (152 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS, continued

Model	Bending Moment at Rated Wind	Lateral Thrust at Rated Wind	Equivalent Flat Plate Area
BOA24004NF	0.97 lbf-ft	2.31 lbf	0.03 ft^2
BOA24006NF	2.13 lbf-ft	3.41 lbf	0.04 ft^2
BOA24006NM	2.07 lbf-ft	3.36 lbf	0.04 ft^2
BOA24008NF	4.24 lbf-ft	5.25 lbf	0.05 ft^2
BOA24008NM	4.14 lbf-ft	5.19 lbf	0.05 ft^2
BOA24008DT12NF	7.16 lbf-ft	6.81 lbf	0.07 ft^2
BOA24008DT12NM	7.04 lbf-ft	6.74 lbf	0.07 ft^2
BOA24008DT7NF	7.16 lbf-ft	6.81 lbf	0.07 ft^2
BOA24008DT7NM	7.04 lbf-ft	6.74 lbf	0.07 ft^2
BOA24010NF	7.16 lbf-ft	6.81 lbf	0.07 ft^2
BOA51004NF	0.30 lbf-ft	1.31 lbf	0.02 ft^2
BOA51004NM	0.27 lbf-ft	1.25 lbf	0.02 ft^2
BOA58006NF	0.51 lbf-ft	1.70 lbf	0.02 ft^2
BOA58006NM	0.48 lbf-ft	1.64 lbf	0.02 ft^2
BOA58010NF	3.57 lbf-ft	4.83 lbf	0.05 ft^2
BOA58010NM	3.48 lbf-ft	4.76 lbf	0.05 ft^2