BA Series

UHF Omnidirectional Dipole Arrays

330 - 420 MHz

These high performance UHF dipole arrays are ideal for highly populated radio sites requiring long haul omnidirectional coverage. They operate over entire bands and offer gains of 3 or 6dBd (depending on model) exhibiting a VSWR of <1.5:1 across the band.

These antennas offer industry leading PIM ratings, essential for the latest digital radio systems. All welded alodined aluminum construction and new fabrication techniques in both the harness and dipole sections have proven to minimize intermodulation and noise generated within the antennas. The entire array rests at ground potential and offers the ultimate in lightning resistant antennas.

The arrays utilize an internal phasing harness in PTFE based double-shielded coaxial cable with polyethylene jacket to aid waterproofing and resist scratch or puncture damage. The use of a unique phasing arrangement provides extensive side lobe suppression and null fill characteristics. The arrays will accept an input power level of 500 watts continuous, making them ideal for high power multiple transmitter applications.

- Ideal for highly populated sites requiring long haul omnidirectional coverage
- Operate over entire 330-420 MHz band
- 3 dBd and 6 dBd gain versions available
- Extensive side lobe suppression and null fill
- BA80-57-DIN may be ordered as 2 x 3dBd arrays on one boom assembly. Specify model BA4040-57-DIN. Typical space isolation between arrays is 35dB.
- **Industry leading PIM ratings (-150dBc) providing low IM and low noise characteristics for optimum performance**

BA80-57-DIN

RFI
9329 Ravena Rd.
Suite C
Twinsburg OH 44087 USA
Phone: 330 486 0706
Fax: 330 486 0705

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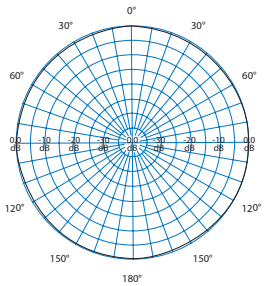
Electrical Specifications

Model Number	BA40-57-DIN	BA80-57-DIN
Nominal Gain ***dBd***	3	6
Frequency ***MHz***	330 - 420	
Tuned Bandwidth	Entire band	
VSWR (Return Loss)	<1.5 :1 (14dB)	
Nominal Impedance Ω	50	
Downtilt	Not offered	
Vertical Beamwidth	30°	16°
Horizontal Beamwidth	Omni +/-0.5dB	
Input Power (Watts)	500	
Passive IM 3rd order (2x20W) ***dBc***	-150	

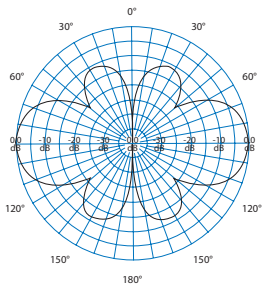
Mechanical Specifications

Model Number		BA40-57-DIN	BA80-57-DIN
Construction & Configuration		4 dipoles (2 bays) Turnstile stacked Single section support	8 dipoles (4 bays) Turnstile stacked Single section support
Length ***inches***		83	118
Weight ***lbs***		11	18
Shipping Weight ***lbs***		76	84
Shipping Dimensions ***inches***	H	17	17
	W	17	17
	L	87	126
Termination		7/16” DIN female with 20” 9142 cable tail	
Mounting Area		20” of 1.9” diam. aluminum	
Suggested Clamps (not included)		UC12	UC12
Projected Area ***ft²***	No ice	2.1	3.5
	With ice	3.4	6.3
Lateral Thrust @ 100mph ***lbs***		51	87
Wind Gust Rating ***mph***	No ice	149	146
	With ice	116	109
Torque @100 mph ***ft-lbs***		86	282

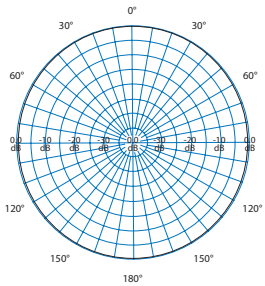
BA40-57 - H Plane



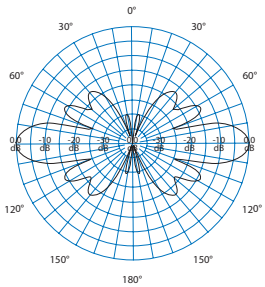
BA40-57 - E Plane



BA80-57 - H Plane



BA80-57 - E Plane



DIGITAL READY -150dBc PIM RATING

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