

UHF Elliptical Dipole Arrays

400 - 520 MHz

The EA series arrays provide exceptionally high gain with an elliptical shaped radiation pattern, ideal for the bi-directional coverage requirements of some "corridor" applications.

The array utilizes an internal phasing harness in PTFE based double shielded coaxial cable with polyethylene jacket to aid waterproofing and resist scratch or puncture damage.

The main lobe of these antennas is strong and highly controlled with extensive side lobe suppression ensuring the integrity of the pattern. Superior performance is maintained over the entire operating bandwidth of the antenna (400-520 MHz). VSWR is maintained at <1.5:1 and input power levels of 500 watts are accommodated for true high density site requirements.

With all welded construction and superior internal harness construction (using highly stable PTFE based cables) the antennas provide not only excellent radiation characteristics but also high levels of intermodulation and noise suppression. **IM performance is a world leading -150dBc based on a two carrier test.** The entire array rests at ground potential and offers the ultimate in lightning resistant antennas.

- Ideal for highly populated sites requiring "corridor" style largely bidirectional coverage
- 5dBd or 8dBd gain versions available
- Extensive side lobe suppression and null fill
- Hermetically sealed internal phasing harness
- EA80-67-DIN can be ordered as 2 x 5dBd arrays on one boom assembly. Specify model EA4040-67-DIN. Typical space isolation between the two arrays is 35dB.
- **Industry leading PIM ratings (-150dBc) providing low IM and low noise characteristics for optimum performance**



EA80-67-DIN

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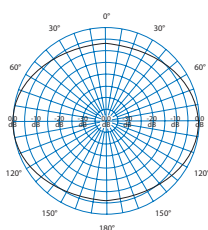
Electrical Specifications

Model Number	EA40-67-DIN	EA80-67-DIN
Nominal Gain <i>dBd</i>	5	8
Frequency <i>MHz</i>	400-520	
Tuned Bandwidth	Entire band	
VSWR (Return Loss)	<1.5 :1 (14dB)	
Nominal Impedance Ω	50	
Downtilt	Not offered	
Vertical Beamwidth	34°	17°
Horizontal Beamwidth	70°	74°
Input Power (Watts)	500	
Passive IM 3rd order (2x20W) <i>dBc</i>	-150	

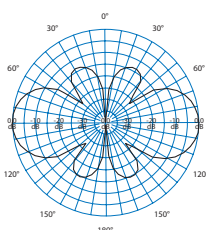
Mechanical Specifications

Model Number	EA40-67-DIN	EA80-67-DIN
Construction & Configuration	4 dipoles (2 bays) In-line stacked Single section support	8 dipoles (4 bays) In-line stacked Single section support
Length <i>inches</i>	83	118
Weight <i>lbs</i>	11	18
Shipping Weight <i>lbs</i>	76	84
Shipping Dimensions <i>inches</i>	H	17
	W	17
	L	126
Termination	7/16" DIN female with 20" 9142 cable tail	
Mounting Area	20" x 1.9" diam. aluminum	
Suggested Clamps (not included)	UC12	UC12
Projected Area <i>ft²</i>	No ice	3.9
	With ice	7.0
Lateral Thrust @ 100mph <i>lbs</i>	56	97
Wind Gust Rating <i>mph</i>	No ice	136
	With ice	101
Torque @100mph <i>ft-lbs</i>	94	318

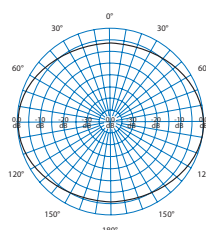
EA40-67-DIN - H Plane



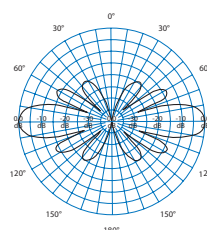
EA40-67-DIN - E Plane



EA80-67-DIN - H Plane



EA80-67-DIN - E Plane



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