

UHF Offset Dipole Arrays

330 - 420 MHz

Offset arrays are directional antennas for use when a base station is at one end of the coverage area. **These antennas offer industry leading PIM ratings, essential for the latest digital radio systems.**

OA Series arrays feature the same solid construction as the BA and EA series. 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 OA Series have slightly more than 170° horizontal beamwidth, thus everything in front of the antenna is given coverage. This eliminates the possibility of fading at the extremities of the target coverage area. The level of radiation at the rear of the antenna is approximately unity gain.

As would be expected from a cardioid array, the vertical beamwidth is slightly greater than its BA omnidirectional or EA elliptical pattern counterparts.

- 5dBd and 9dBd gain versions available
- Hermetically sealed internal phasing harness
- OA40-57-DIN can be ordered 2 x 5dBd arrays on one boom assembly. Specify model OA2020-57-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**



OA40-57-DIN

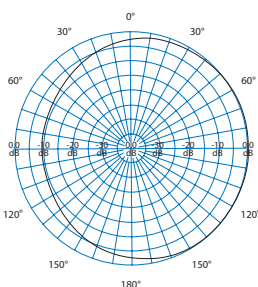
Electrical Specifications

Model Number	OA20-57-DIN	OA40-57-DIN
Nominal Gain <i>dBd</i>	5	9
Frequency <i>MHz</i>	330 - 420	
Tuned Bandwidth	Entire band	
VSWR (Return Loss)	< 1.5:1 (14dB)	
Nominal Impedance Ω	50	
Downtilt	not offered	
Vertical Beamwidth	35°	17°
Horizontal Beamwidth	175°	173°
Input Power (Watts)	500	
Passive IM 3rd order (2x20W) <i>dBc</i>	-150	

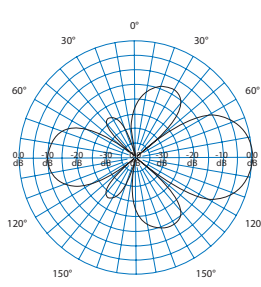
Mechanical Specifications

Model Number	OA20-57-DIN	OA40-57-DIN
Construction & Configuration	2 dipoles (2 bays) Single sided Single section support	4 dipoles (4 bays) Single sided Single section support
Length <i>inches</i>	83	118
Weight <i>lbs</i>	9	14
Shipping Weight <i>lbs</i>	35	44
Shipping Dimensions <i>inches</i>	H W L	H W L
	15 7 87	17 7 126
Termination	7/16" DIN female with 20" 9142 cable tail.	
Mounting Area	20" of 1.9" dia aluminum	
Suggested Clamps (not included)	UC12	UC12
Projected Area <i>ft²</i>	No ice With ice	No ice With ice
	1.8 2.9	3.0 5.2
Lateral Thrust @ 100mph <i>lbs</i>	45	74
Wind Gust Rating <i>mph</i>	No ice With ice	No ice With ice
	118 75	149 113 243
Torque @100 mph <i>ft-lbs</i>	75	243

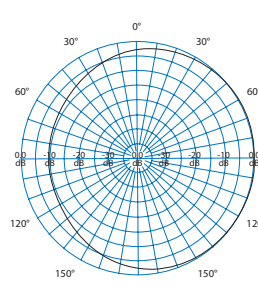
OA20-57 - H Plane



OA20-57 - E Plane



OA40-57 - H Plane



OA40-57 - E Plane

