

OA Series



UHF Offset Dipole Arrays

400 - 520 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, 9dBd or 11dBd gain versions available
- Hermetically sealed internal phasing harness
- OA80-67-DIN can be ordered 2 x 9dBd arrays on one boom assembly. Specify model OA4040-67-DIN. Typical space isolation between the two arrays is 35dB.
- OA40-67-DIN can be ordered 2 x 5dBd arrays on one boom assembly. Specify model OA2020-67-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.**



OA40-67-DIN

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

Copyright RF Industries Pty Ltd 2011. Subject to change without notice.

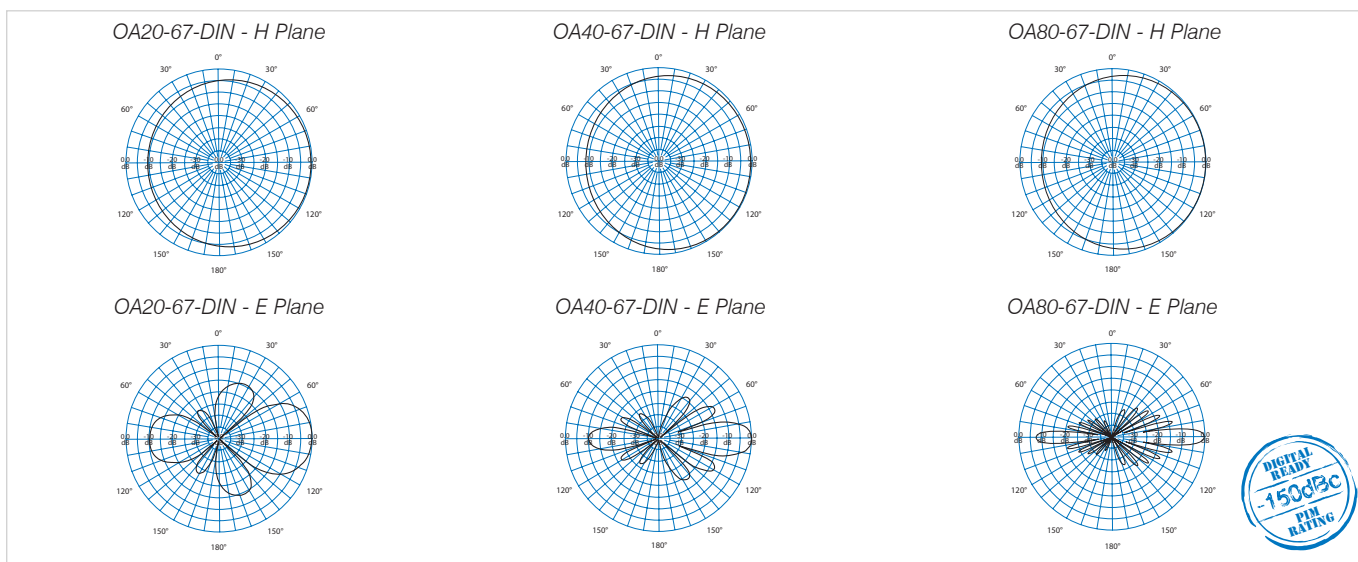


Electrical Specifications

Model Number	OA20-67-DIN	OA40-67-DIN	OA80-67-DIN
Nominal Gain <i>dBd</i>	5	9	11
Frequency <i>MHz</i>	400-520		
Tuned Bandwidth	Entire band		
VSWR (Return Loss)	<1.5 :1 (14dB)		
Nominal Impedance Ω	50		
Downtilt	Not offered		0° Std or -3° See note (2)
Vertical Beamwidth	35°	17°	8°
Horizontal Beamwidth	180°	178°	180°
Input Power (<i>Watts</i>)	500		
Passive IM 3rd order (<i>2x20W</i>) <i>dBc</i>	-150		-140

Mechanical Specifications

Model Number	OA20-67-DIN	OA40-67-DIN	OA80-67-DIN
Construction & Configuration	2 dipoles (2 bays) Single sided Single section support	4 dipoles (4 bays) Single sided Single section support	8 dipoles (8 bays) Single sided Dual section support External final harness
Length <i>inches</i>	83	118	197
Weight <i>lbs</i>	9	14	38
Shipping Weight <i>lbs</i>	35	44	82
Shipping Dimensions <i>inches</i>	H	15	17
	W	7	10
	L	87	126
Termination	7/16" DIN female with 20" 9142 cable tail		
Mounting Area	20" x 1.9" diam. aluminum		20" x 2.5" diam. aluminum
Suggested Clamps (not included)	UC12	UC12	UC12
Projected Area <i>ft</i> ²	No ice	1.8	2.9
	With ice	2.8	5.0
Lateral Thrust @ 100mph <i>lbs</i>	44	72	126
Wind Gust Rating <i>mph</i>	No ice	149	
	With ice	119	114
Torque @100mph <i>ft-lbs</i>	73	235	829



(1) Single section arrays are rated to -150dBc PIM rating. Dual section (OA80-67-DIN) arrays are rated at -140dBc.

(2) Factory pre-set downtilt of 3° may be specified on OA80-67-DIN antennas by adding -T3 to the part number ordered e.g. OA80-67-DIN-T3