

Omni Directional

UHF Dipole Array and Collinear Antennas

400-520 MHz



DIPOLE ARRAYS										CORPORATE COLLINEARS		
Electrical Specifications												
Model Number		BA160-67-DIN		BA8080-67-DIN		BA80-67-DIN		BA4040-67-DIN		BA40-67-DIN		CC450-06
Nominal Gain <i>dBd (dBi)</i>		9 (11.1)		2 x 6 (8.1)		6 (8.1)		2 x 3 (5.1)		3 (5.1)		5 (7.1)
Frequency <i>MHz</i>		400-520		400-520		400-520		400-520		400-520		450-520
Tuned Bandwidth <i>MHz</i>		120		120		120		120		120		70
VSWR		<1.5:1		<1.5:1		<1.5:1		<1.5:1		<1.5:1		<1.5:1
Nominal Impedance Ω		50		50		50		50		50		50
Downtilt°		0 Std or -3 ¹		NA		NA		NA		NA		NA
Vertical Beamwidth°		9		2 x 16		16		2 x 30		30		15
Horizontal Beamwidth°		Omni +/-0.5dB		Omni +/-0.5dB		Omni +/-0.5dB		Omni +/-0.5dB		Omni +/-0.5dB		Omni +/-0.5dB
Input Power <i>Watts</i>		500		500		500		500		500		250
Passive IM 3rd order (<i>2x20W</i>) <i>dBc</i>		<-140		<-140		<-150		<-150		<-150		<-150

Mechanical Specifications												
Model Number		BA160-67-DIN		BA8080-67-DIN		BA80-67-DIN		BA4040-67-DIN		BA40-67-DIN		CC450-06
Construction & Configuration		16 dipoles (8 bays) Turnstile stacked Dual section support External final harness		2x8 dipoles (4 bays) Turnstile stacked Dual section support		8 dipoles (4 bays) Turnstile stacked Single section support		2x4 dipoles (2 bays) Turnstile stacked Single section support		4 dipoles (2 bays) Turnstile stacked section support		Composite fiberglass sky blue radome, aluminum mounting tube
Length <i>inches</i>		197		197		118		118		83		107
Weight <i>lbs</i>		44		44		18		18		11		22
Shipping Weight <i>lbs</i>		124		124		84		84		76		50
Shipping Dimensions <i>inches</i>	H	17		17		17		17		17		6
	W	22		22		17		17		17		6
	L	126		126		126		126		87		118
Termination		7/16 DIN female on cable tail										7/16 DIN fixed female
Mounting Area		20" x 2.5" diam aluminum								20" x 2" diam aluminum		20" x 3.5" diam aluminum
Suggested Clamps (not included)		UC1142				UC1142						
Projected Area <i>ft²</i>	No ice	6.5		6.5		3.3		3.3		2		2.3
	With ice	10.9		10.9		5.9		5.9		3.2		2.8
Lateral Thrust @ 100mph <i>lbs</i>		161		161		82		82		49		57
Wind Gust Rating <i>mph</i>	No ice	134		134		> 150		> 150		> 150		> 150
	With ice	104		104		112		112		117		143
Torque @100mph <i>ft-lbs</i>		1045		1045		268		268		82		166

(1) Factory pre-set downtilt of 3° may be specified on BA160-41-DIN antennas by adding -T3 to the part number ordered e.g. BA160-41-DIN-T3

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Omni Directional

UHF Meander Collinear Antennas

400-520 MHz



MEANDER COLLINEARS

Electrical Specifications

Model Number	COL45-70	COL45-71	COL45-72	COL410-70	COL410-71	COL410-72
Nominal Gain <i>dBd (dBi)</i>	7 (9.1)	7 (9.1)	7 (9.1)	9 (11.1)	9 (11.1)	9 (11.1)
Frequency <i>MHz</i>	450-470	470-490	490-520	450-470	470-490	490-520
Tuned Bandwidth <i>MHz</i>	20	20	30	20	20	30
VSWR	<1.5:1	<1.5:1	<1.5:1	<1.5:1	<1.5:1	<1.5:1
Nominal Impedance Ω	50	50	50	50	50	50
Downtilt	NA	NA	NA	NA	NA	NA
Vertical Beamwidth°	12.5	12.5	12.5	7.3	7.3	7.3
Horizontal Beamwidth°	Omni +/-0.5dB	Omni +/-0.5dB	Omni +/-0.5dB	Omni +/-0.5dB	Omni +/-0.5dB	Omni +/-0.5dB
Input Power <i>Watts</i>	250	250	250	250	250	250
Passive IM 3rd order (2x20W) <i>dBc</i>	<-150	<-150	<-150	<-150	<-150	<-150

Mechanical Specifications

Model Number	COL45-70	COL45-71	COL45-72	COL410-70	COL410-71	COL410-72
Construction & Configuration	Composite fiberglass sky blue radome, aluminum mounting tube	Composite fiberglass sky blue radome, aluminum mounting tube	Composite fiberglass sky blue radome, aluminum mounting tube	Composite fiberglass sky blue radome, aluminum mounting tube	Composite fiberglass sky blue radome, aluminum mounting tube	Composite fiberglass sky blue radome, aluminum mounting tube
Length <i>inches</i>	111	107	103	212	206	195
Weight <i>lbs</i>	6	6	6	23	22	22
Shipping Weight <i>lbs</i>	13	13	13	51	49	48
Shipping Dimensions <i>inches</i>	H	3	3	5	5	5
	W	3	3	5	5	5
	L	118	114	110	221	213
Termination	7/16" DIN fixed female			7/16" DIN fixed female		
Mounting Area	20" x 2" diam aluminum			30" x 3" diam. aluminum		
Suggested Clamps (not included)	UC12			UC12		
Projected Area <i>ft²</i>	No ice	1.4	1.3	1.3	4.5	4.3
	With ice	2.2	2.1	2.0	6.2	6.0
Lateral Thrust @ 100mph <i>lbs</i>	34	33	32	111	106	101
Wind Gust Rating <i>mph</i>	No ice	>150	>150	>150	>150	>150
	With ice	118	118	119	167	178
Torque @100mph <i>ft-lbs</i>	106	98	88	784	712	636

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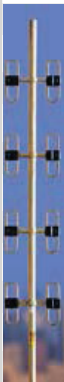
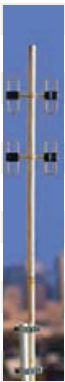
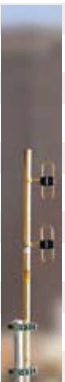


Directional

UHF Dipole Array Antennas

400 - 520 MHz



DIPOLE ARRAYS							
Electrical Specifications							
Model Number		EA80-67-DIN		EA40-67-DIN		OA40-67-DIN	
Nominal Gain <i>dBd (dBi)</i>		8 (10.1)		5 (7.1)		9 (11.1)	
Frequency <i>MHz</i>		400-520		400-520		400-520	
Tuned Bandwidth <i>MHz</i>		120		120		120	
VSWR		<1.5:1		<1.5:1		<1.5:1	
Nominal Impedance Ω		50		50		50	
Downtilt		NA		NA		NA	
Vertical Beamwidth		17°		34°		17°	
Horizontal Beamwidth		74°		70°		178°	
Input Power <i>Watts</i>		500		500		500	
Passive IM 3rd order <i>(2x20W) dBc</i>		<-150		<-150		<-150	

Mechanical Specifications							
Model Number		EA80-67-DIN		EA40-67-DIN		OA40-67-DIN	OA20-67-DIN
Construction & Configuration		8 dipoles (4 bays) In-line stacked Single section support		4 dipoles (2 bays) In-line stacked Single section support		4 dipoles Single sided Single section support	2 dipoles Single sided Single section support
Length <i>inches</i>		118		83		118	83
Weight <i>lbs</i>		18		11		14	9
Shipping Weight <i>lbs</i>		84		76		44	35
Shipping Dimensions <i>inches</i>	H	17		17		17	15
	W	17		17		7	7
	L	126		87		126	87
Termination		7/16 DIN female on cable tail					
Mounting Area		20" x 2" diam aluminum					
Suggested Clamps <i>(not included)</i>		UC1142					
Projected Area <i>ft²</i>	No ice	3.9		2.3		2.9	1.8
	With ice	7.0		3.8		5.0	2.8
Lateral Thrust @ 100mph <i>lbs</i>		97		56		72	44
Wind Gust Rating <i>mph</i>	No ice	136		>150		>150	>150
	With ice	101		115		114	119
Torque @100mph <i>ft-lbs</i>		318		94		235	73

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