

Omni Directional

UHF Dipole Array and Corporate Collinear Antennas

400-520 MHz



Electrical Specifications

	DIPOLE ARRAYS						CORPORATE COLLINEARS	
Model Number	BA160-67-P	BA8080-67-P	BA80-67-P	BA4040-67-P	BA40-67-P		CC450-06-P	CC450-09-P
Nominal Gain <i>dBi</i> (dBi)	9 (11.1)	2 x 6 (8.1)	6 (8.1)	2 x 3 (5.1)	3 (5.1)		5 (7.1)	8.5 (10.6)
Frequency <i>MHz</i>	400-520	400-520	400-520	400-520	400-520		450-520	450-512
Tuned Bandwidth <i>MHz</i>	120	120	120	120	120		70	62
VSWR	<1.5:1	<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	50
Downtilt	0 Std or -3° ¹	NA	NA	NA	NA		NA	0 Std, -3, -6
Vertical Beamwidth °	9	2 x 16	16	2 x 30	30		15	8
Horizontal Beamwidth °	Omni +/-0.5dB	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		500	500
Passive IM 3rd order (2x20W) <i>dBc</i>	<-140	<-140	<-150	<-150	<-150		<-150	<-150

Mechanical Specifications

	DIPOLE ARRAYS						CORPORATE COLLINEARS	
Model Number	BA160-67-P	BA8080-67-P	BA80-67-P	BA4040-67-P	BA40-67-P		CC450-06-P	CC450-09-P
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	2 x4 dipoles (2 bays) Turnstile stacked Single section support	4 dipoles (2 bays) Turnstile stacked section support		Composite fiberglass sky blue radome, aluminum mounting tube	Composite fiberglass sky blue radome, aluminum mounting tube
Length <i>inches</i>	224.5	224.5	118	118	83		107	205
Weight <i>lbs</i>	44	44	18	18	11		22	54
Shipping Weight <i>lbs</i>	124	124	84	84	76		50	75
Shipping Dimensions <i>inches</i>	H	17	17	17	17		6	4.5
	W	22	22	17	17		6	4.5
	L	126	126	126	126		118	215
Termination	4.3-10 female tail	4.3-10 female tails	4.3-10 female tail	4.3-10 female tails	4.3-10 female tail		4.3-10 fixed female	
Mounting Area	20" x 2.5" diam aluminum				20" x 2" diam aluminum		20" x 3.5" diam aluminum	30" x 3.5" diam aluminum
Suggested Clamps (not included)	UC1142							-
Projected Area <i>ft²</i>	No ice	6.5	6.5	3.3	3.3	2	2.3	5
	With ice	10.9	10.9	5.9	5.9	3.2	2.8	6.3
Lateral Thrust @ 100mph <i>lbs</i>		161	161	82	82	49	57	123
Wind Gust Rating <i>mph</i>	No ice	134	134	>150	>150	>150	>150	>150
	With ice	104	104	112	112	117	143	-
Torque @ 100mph <i>ft-lbs</i>	1045	1045	268	268	82		166	987

(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



Electrical Specifications

Model Number	MEANDER COLLINEARS									
	COL45-470-P		COL45-490-P		COL45-520-P		COL410-470-P		COL410-490-P	
Nominal Gain <i>dBd (dBi)</i>		7 (9.1)		7 (9.1)		7 (9.1)		9 (11.1)		9 (11.1)
Frequency <i>MHz</i>		450-470		470-490		490-520		450-470		470-490
Tuned Bandwidth <i>MHz</i>		20		20		30		20		20
VSWR		<1.5:1		<1.5:1		<1.5:1		<1.5:1		<1.5:1
Nominal Impedance Ω		50		50		50		50		50
Downtilt		NA		NA		NA		NA		NA
Vertical Beamwidth $^{\circ}$		12.5		12.5		12.5		7.3		7.3
Horizontal Beamwidth $^{\circ}$		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
Passive IM 3rd order (2x20W) <i>dBc</i>		<-150		<-150		<-150		<-150		<-150

Mechanical Specifications

		MEANDER COLLINEARS					
Model Number		COL45-470-P	COL45-490-P	COL45-520-P	COL410-470-P	COL410-490-P	COL410-520-P
Construction & Configuration		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	3	5	5	5
	W	3	3	3	5	5	5
	L	118	114	110	221	213	205
Termination		4.3-10 fixed female					
Mounting Area		20" x 2" diam. aluminum			30" x 3" diam. aluminum		
Suggested Clamps (not included)		UC12			UC1142		
Projected Area <i>ft²</i>	No ice	1.4	1.3	1.3	4.5	4.3	4.1
	With ice	2.2	2.1	2.0	6.2	6.0	5.7
Lateral Thrust @ 100mph <i>lbs</i>		34	33	32	111	106	101
Wind Gust Rating <i>mph</i>	No ice	> 150					
	With ice	118	118	119	167	178	195
Torque @ 100mph <i>ft-lbs</i>		106	98	88	784	712	636



Electrical Specifications

	MEANDER COLLINEARS									
Model Number	COL43-470-P	COL43-490-P	COL43-520-P	COL45-470-P	COL45-490-P	COL45-520-P	COL410-470-P	COL410-490-P	COL410-520-P	
Nominal Gain <i>dBi</i> (dBi)	5 (7.1)	5 (7.1)	5 (7.1)	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	450-470	470-490	490-520	
Tuned Bandwidth <i>MHz</i>	Full Band	Full Band	Full Band	Full Band	Full Band	Full Band	Full Band	Full Band	Full Band	
VSWR	<1.5:1	<1.5:1	<1.5:1	<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	50	50	50	
Vertical Beamwidth $^{\circ}$	21	21	21	12.5	12.5	12.5	7.2	7.2	7.2	
Horizontal Beamwidth $^{\circ}$	Omni +/- 0.5dB	Omni +/- 0.5dB	Omni +/- 0.5dB	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	250	250	250	
Passive IM 3rd order (2x20W) <i>dBc</i>	-150	-150	-150	-150	-150	-150	-150	-150	-150	

Mechanical Specifications

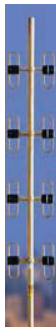
		MEANDER COLLINEARS								
Model Number		COL43-470-P	COL43-490-P	COL43-520-P	COL45-470-P	COL45-490-P	COL45-520-P	COL410-470-P	COL410-490-P	COL410-520-P
Construction & Configuration		Sky blue fibre glass radome						Ecofilm aluminium mount tube with sky blue fibreglass radome		
Length <i>inches</i>		73.2	70.6	68.3	111	107	103	212	206	195
Weight <i>lbs</i>		6.0	6.0	5.7	5.5			23	22	22
Shipping Weight <i>lbs</i>		7.7	7.7	7.1	8.8			51	49	47
Shipping Dimensions <i>inches</i>	H	2.8						4.5		
	W	2.8						4.5		
	L	86.6		78.7	118.1	114.2	110.2	221	213	205
Termination		4.3 - 10 fixed Female								
Mounting Area		19.7 x 1.9Ø			19.6 x 1.9Ø			30 x 3Ø		
Suggested Clamps (not included)		2 x UC1						2 x UC114		
Projected Area <i>ft²</i>	No ice	0.9	0.8		1.4	1.3	1.3	4.5	4.3	4.1
	With ice	1.3	1.2		2.2	2.1	2.0	6.2	6.0	5.7
Lateral Thrust @ 100mph <i>lbs</i>		15.3	13.7	12.6	88.9	82.0	73.9	111	106	101
Wind Gust Rating <i>mph</i>	No ice	149.1						150		
Torque @ 100mph <i>ft-lbs</i>		50.1	45.0	41.3	105.5	97.4	87.8	784	712	636



Directional
UHF Dipole Array Antennas
400-520 MHz



Electrical Specifications

	DIPOLE ARRAYS							
Model Number	EA80-67-P		EA40-67-P		OA40-67-P		OA20-67-P	
Nominal Gain <i>dBd (dBi)</i>		8 (10.1)		5 (7.1)		9 (11.1)		5 (7.1)
Frequency <i>MHz</i>		400-520		400-520		400-520		400-520
Tuned Bandwidth <i>MHz</i>		120		120		120		120
VSWR		<1.5 :1		<1.5 :1		<1.5 :1		<1.5 :1
Nominal Impedance Ω		50		50		50		50
Downtilt		NA		NA		NA		NA
Vertical Beamwidth $^{\circ}$		17		34		17		35
Horizontal Beamwidth $^{\circ}$	74	70	178	180				
Input Power <i>Watts</i>	500	500	500	500				
Passive IM 3rd order (2x20W) <i>dBc</i>	<-150	<-150	<-150	<-150				

Mechanical Specifications

		DIPOLE ARRAYS			
Model Number		EA80-67-P	EA40-67-P	OA40-67-P	OA20-67-P
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	128	87
Termination		4.3-10 female tail			
Mounting Area		20" x 2" diam aluminum			
Suggested Clamps (not included)		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

