

CC807 Series

7/800 MHz Corporate Collinear Antennas

746-870 MHz



These industry leading PIM and PIP rated collinear arrays allow site operators to combine, with complete integrity, a large number of communications services into a single, low profile collinear antenna array.

The true corporate feed of these arrays maintains total pattern integrity over a very broad operating bandwidth, similar to that previously available only in exposed dipole configurations. This is now achieved in the preferred form factor of a fully enclosed fiberglass radome. The corporate collinears employ a unique corporate phasing system enabling precision control of the element placements ensuring phase purity resulting in exceptional bandwidth and electrical performance .

Gain is maximized and side lobes reduced dramatically. In a patent pending design approach the individual dipole elements including matching network are fabricated entirely of a flexible circuit board. The dipole elements are soldered to a brass support tube which is directly connected to the mounting tube and the lightning spike at the top of the antenna.

The result of this unique, incredibly strong design is:

- Peak Instantaneous Power rating (PIP) 25 kW
- Passive Intermodulation rating (PIM) -150 dBc
- High continuous power rating
- Extraordinary bandwidth characteristics with superior pattern control
- Field invertible (most models)



USA patent: 7,365,698

Australia patent: 2005904524



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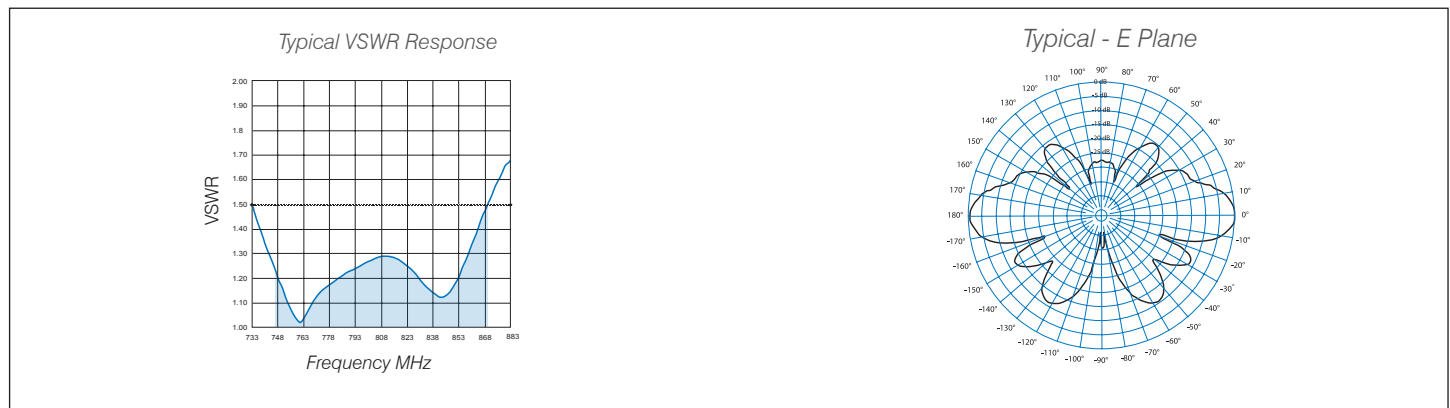
Electrical Specifications

Model Number	CC807-03	CC807-06	CC807-08	CC807-11
Nominal Gain <i>dBd</i> (<i>dBi</i>)	3 (5.1)	6 (8.1)	8 (10.1)	10.5 (12.6)
Frequency <i>MHz</i>	746 - 870			
Tuned Bandwidth <i>MHz</i>	124			
VSWR	<1.5 :1			
Nominal Impedance Ω	50			
Downtilt	N/A	0° Std - 5° (1)	0° Std - 5° (1)	0° Std - 5° (1)
Vertical Beamwidth°	28	17	9	4.5
Horizontal Beamwidth	Omni +/- 0.5dB			
Input Power <i>Watts</i>	250	500	500	500
Passive IM 3rd order (2x20W) <i>dBc</i>	-150			
Peak Instantaneous Power <i>kW</i>	25			

Mechanical Specifications

Model Number	CC807-03	CC807-06	CC807-08	CC807-11	
Construction	Composite fiberglass sky blue radome aluminum mounting tube				
Length <i>inches</i>	48	69	114	206	
Weight <i>lbs</i>	9	16	27	49	
Radome Diameter <i>inches</i>	3				
Shipping Weight <i>lbs</i>	18	25	40	88	
Shipping Dimensions <i>inches</i>	H	6			
	W	6			
	L	56	75	119	220
Termination	7/16" DIN fixed female				
Invertible Mounting	Yes (2)				
Suggested Clamps (not included)	UC1143				
Projected area <i>ft²</i>	No ice	0.9	1.4	2.5	4.9
	with ice	1.2	1.7	3.1	6.2
Lateral (Thrust) @ 100mph <i>lbs</i>	22	34	62	121	
Wind Gust Rating <i>mph</i>	> 150				
Torque @ 100mph <i>ft-lbs</i>	15	54	205	761	

Note (1) Pre-set downtilt variations of 5 degrees are available in the following models CC807-08, CC807-11. Simply add -T5 at the end of the model being ordered. E.g. CC807-08-T5, CC807-11-T5
 (2) Downtilt versions can not be field inverted.



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