

800MHz Corporate Collinear Antennas

748-870MHz

CC807 Series



These industry leading, full featured corporate collinear arrays allow site operators to combine, with complete integrity, a large number of communications services into a single, low profile antenna solution.

The corporate feed design employed by RFI maintains superior pattern control, allowing gain to be maximised with zero tilt variation over a very broad bandwidth, comparable to that only previously available in exposed dipole array configurations. This is achieved in the preferred form factor of a fully enclosed fibreglass radome, providing a reduction in wind loading, ice loading and tower loading in comparison.

The CC807 series have been designed with an exceptional power rating of 500W across the band as well as a Peak Instantaneous Power (PIP) rating of 25kW to cater for the peak voltage levels present in large multi-carrier combining environments. RFI's refined design processes and proven construction methods achieve a PIM rating of -150dBc, further ensuring performance is maintained for the service life of the antenna.

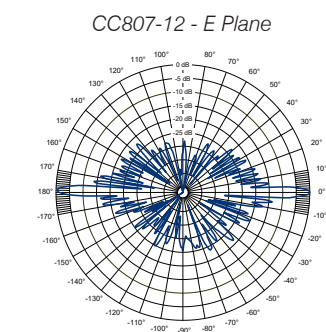
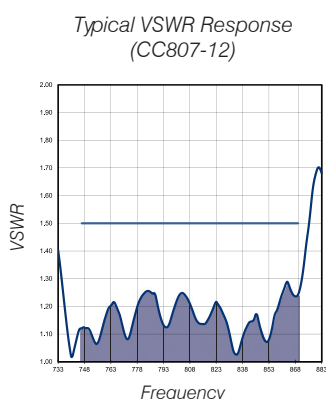
Features:

- 500W continuous power rating
- -150dBc Passive Intermodulation (PIM) rating, 100% PIM tested
- 25 kW Peak Instantaneous Power (PIP) rating
- DC grounding on all elements for the ultimate in lightning protection and dissipation of static noise
- Light weight dipole construction using RFI's patented flexi-PCB architecture, maintains a low centre of gravity reducing tip deflection and sway
- Field invertible (excluding tilt models)
- Preset downtilt variations of 2 and 4 degrees available, see note (1)



Electrical Specifications

Model Number	CC807-12	CC807-09
Nominal Gain dBi (dBi)	13.6 (11.5)	11.1 (9.0)
Frequency MHz	746-870	
Tuned Bandwidth MHz	Full	
VSWR	1.5:1	
Nominal Impedance Ω	50	
Downtilt°	0 std, 2, 4	
Vertical Beamwidth°	4	8
Horizontal Beamwidth°	Omni +/- 0.5dB	
Power W	500	
Passive IM 3 rd order (2x20W) dBc	-150	
Peak Instantaneous Power kW	25	



Mechanical Specifications

Model Number	CC807-12	CC807-09
External Construction	Sky blue fibreglass radome, Ecofilm™ plated aluminium mounting tube	
Radome Diameter mm (inches)	76 (3.0)	
Length mm (inches)	6235 (245.5)	3135 (123.4)
Weight kg (lbs)	25.5 (56.2)	14 (30.9)
Termination	Integrated 7/16 DIN Female	
Mounting Area mm (inches)	750 x 90 (30 x 3.5) diameter Ecofilm™ plated aluminium	
Suggested Clamps	3 x UC-114	
Shipping Dimensions mm (inches)	H	152 (6.0)
	W	152 (6.0)
	L	6435 (253.3)
Shipping Weight kg (lbs)	36.5 (80.5)	20.0 (44.1)
Projected Area cm ² (ft ²)	No Ice	5559 (6.0)
	With ice	7037 (7.6)
Lateral Thrust @ 160km/h N (100mph lbs)	659 (148)	308 (69)
Wind Gust Rating km/h (mph)	>240 (150)	
Torque @ 160km/h Nm (100mph ft-lbs)	1823 (1345)	413 (305)

(1) Downtilt versions are not field invertible

Note: Pre-set downtilt variations of 2 and 4 degrees are available in the CC807-12 model. Simply add a -T2 or a -T4 at the end of the model number to order the respective tilt variation. Eg. CC807-12-T2

USA Patent: 7, 365, 698, and Australian Patent: 2005904524