

800MHz Corporate Collinear Antennas

748-870MHz

CC807 Series



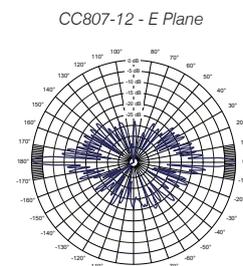
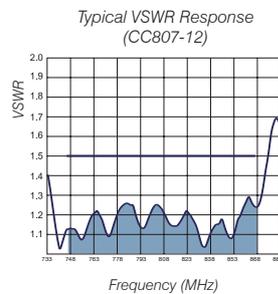
These industry leading, full featured corporate collinear arrays allow site operators to combine, with complete integrity, a large number of communications services into a single, low profile antenna solution.

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

Mechanical

Model Number	CC807-09-P	CC807-12-P
Construction	Sky blue fibreglass radome	
Radome Diameter mm (inches)	76 (3.0)	
Length mm (inches)	3135 (123.4)	6235 (245.5)
Weight kg (lbs)	14 (30.9)	25.5 (56.2)
Termination	Integrated 4.3-10 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	115 (4.5)
	W	115 (4.5)
	L	3335 (131.3)
Shipping Weight kg (lbs)	20.0 (44.1)	36.5 (80.5)
Projected area cm ² (ft ²)	No Ice	2597 (2.8)
	With Ice	3192 (3.4)
Lateral Thrust @160km/h N (100 mph lbs)	308 (69)	659 (148)
Wind Gust Rating km/h (mph)	No Ice	>240 (150)
Torque @ 160km/h Nm (100mph ft-lbs)	413 (305)	1823 (1345)

(1) To order pre-set downtilt versions available, simply add a -T2 or -T4 towards the end of the part number to denote downtilt model required. For eg. CC807-12-T2-P to order CC807-12-P with 2deg of downtilt. Please note: Models with downtilt are NOT field invertible. . Eg. CC807-12-T2-P