

800 MHz Corporate Collinear Antennas

748-870 MHz

CC807-12 Series



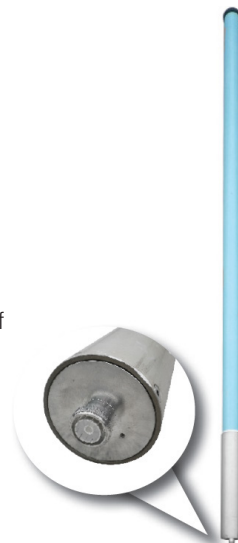
These industry leading, full featured corporate collinear arrays allow site operators to combine, with complete integrity, a large number of communications services into a single, low profile antenna solution.

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
Nominal Gain <i>dBi</i> (dBi)	11.5 (13.6)
Frequency <i>MHz</i>	746 - 870
Tuned Bandwidth <i>MHz</i>	Full
VSWR	1.5:1
Nominal Impedance Ω	50
Downtilt°	0 Std, 2, 4
Vertical Beamwidth°	4
Horizontal Beamwidth°	Omni +/- 0.5dB
Power <i>W</i>	500
Passive IM 3rd order (2x20W) <i>dBc</i>	-150
Peak Instantaneous Power <i>kW</i>	25

Mechanical Specifications

Model Number	CC807-12
External Construction	Sky blue fibreglass radome, Ecofilm™ plated Aluminium mounting tube
Radome Diameter <i>mm (inches)</i>	76 (3.0)
Length <i>mm (inches)</i>	6235 (245.5)
Weight <i>kg (lbs)</i>	25.5 (56.2)
Termination	Integrated 7/16 DIN Female
Mounting Area <i>mm (inches)</i>	750 x 90 (30 x 3.5) diameter Ecofilm™ plated aluminium
Suggested Clamps	3 x UC-114
Shipping Dimensions <i>mm (inches)</i>	H 152 (6.0) W 152 (6.0) L 6435 (253.3)
Shipping Weight <i>kg (lbs)</i>	36.5 (80.5)
Projected Area <i>cm² (ft²)</i>	No Ice 5559 (6.0) With Ice 7037 (7.6)
Lateral Thrust @ 160km/h <i>N (100mph lbs)</i>	659 (148)
Wind Gust Rating <i>km/h (mph)</i>	> 240 (150)
Torque @ 160km/h <i>Nm (100mph ft-lbs)</i>	1823 (1345)

(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

