

UHF Corporate Collinear Antennas

CC450 Series

450-512 MHz



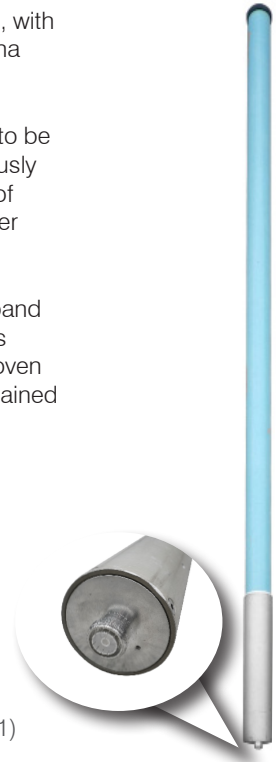
These industry leading, full featured corporate collinear arrays allow site operators to combine, with complete integrity, a large number of communications services into a single, low profile antenna solution.

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 by comparison.

The CC450 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.

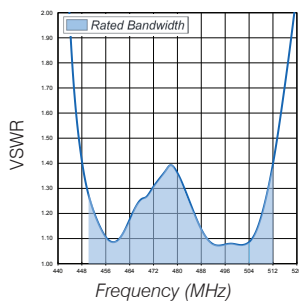
Features:

- 500W continuous power rating
- -150dBc Passive Intermodulation (PIM) rating
- 25 kW Peak Instantaneous Power (PIP) rating
- DC grounding on all elements for the ultimate in lightning protection and dissipation of static noise
- Preset downtilt variations of 3 and 6 degrees available in the CC450-09 model - see notes (1)
- CC450-06 and CC450-09 are field invertible (excluding tilt variations)



Electrical

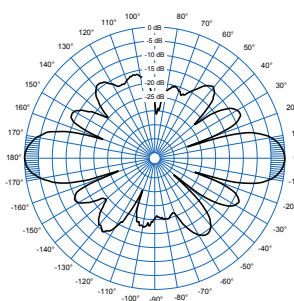
Typical VSWR Response (CC450-06)



Model Number	CC450-06	CC450-09
Nominal Gain dBd (dBi)	6.0 (8.1)	8.5 (10.6)
Frequency MHz	450 - 512	
Tuned Bandwidth	Full Band	
VSWR (Return Loss)	<1.5:1 (14dB)	
Nominal Impedance Ω	50	
Vertical Beamwidth ^o	15	8
Horizontal Beamwidth ^o	Omni +/- 0.5dB	
Power W	500	
Passive IM 3rd order (dBc)	-150	
Peak instantaneous power (kW)	25	

Mechanical

Typical E Plane (CC450-06)



Model Number	CC450-06	CC450-09	
Construction & Configuration	Sky blue fibreglass radome		
Length mm	2876	5206	
Radome Diameter mm	77		
Weight kg	10.0	24.5	
Termination	Integrated 7/16 DIN		
Shipping Dimensions mm	H	115	
	W	115	
	L	3076	5406
Termination	7/16" DIN fixed female		
Mounting Area mm	500mm x 89.0mm diameter Eco-film™ plated aluminium	750mm x 89.0mm diameter Eco-film™ plated aluminium	
Suggested Clamps	2 x UC-114		
Projected area cm ²	no ice	2378	4615
	with ice	2903	5843
Lateral Thrust @ 160km/h N	282	547	
Wind Gust Rating km/h	240		
Torque @160km/h Nm	342	1232	

Note: Pre-set downtilt variations of 3 and 6 degrees are available in the CC450-09 model. Simply add a -T3 or a -T6 at the end of the model number to order the respective tilt variation. Eg. CC450-09-T3