

UHF Corporate Collinear Antennas

450-512 MHz

CC450 Series



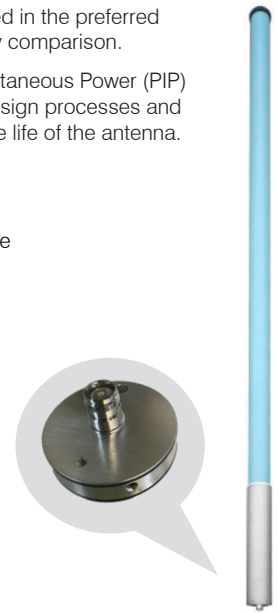
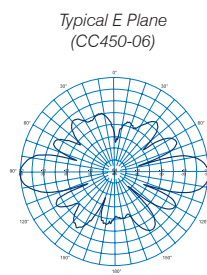
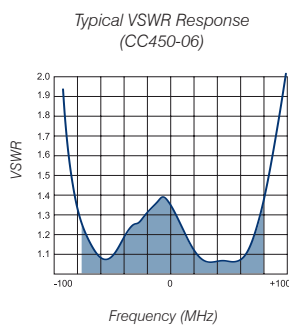
These industry leading, full featured corporate collinear arrays allow site operators to combine, with complete integrity, a large number of communications services into a single, low profile antenna solution.

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 by comparison.

The CC450 series have been designed with an exceptional power rating of 500W across the band as well as 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
- 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 and CC450-06 models, see note ⁽¹⁾
- CC450-06 and CC450-09 are field invertible (excluding tilt variations)



Electrical Specifications

Model Number	CC450-06-P	CC450-09-P
Nominal Gain dBi (dBi)	6.0 (8.1)	8.5 (10.6)
Frequency MHz	450 - 512	
Tuned Bandwidth MHz	Full Band	
VSWR (Return Loss)	<1.5:1 (14dB)	
Nominal Impedance Ω	50	
Downtilt* ⁽¹⁾	0 Std, -3, -6	0 Std, -3, -6
Vertical Beamwidth°	15	8
Horizontal Beamwidth°	Omni +/- 0.5dB	
Input Power W	500	
Passive IM 3rd order (2x20W) dBc	-150	
Peak Instantaneous Power kW	25	

Mechanical

Model Number	CC450-06-P	CC450-09-P
Construction	Sky blue fibreglass radome	
Length m (inches)	2876 (113)	5206 (205)
Radome Diameter mm (inches)	77 (3)	
Weight kg (lbs)	10.0 (22)	24.5 (54)
Shipping Weight kg (lbs)	15.4 (34)	34.0 (75)
Shipping Dimensions mm (inches)	H	115 (4.5)
	W	115 (4.5)
	L	3076 (122)
Termination	Integrated 4.3-10 female	
Mounting Area mm (inches)	500mm x 89.0mm (20" x 3.5") diameter, Eco-film™ plated aluminium	750mm x 89.0mm (30" x 3.5") diameter, Eco-film™ plated aluminium
Invertible Mounting	Yes (1)	
Projected area cm ² (ft ²)	No Ice	2378 (2.6)
	With Ice	2903 (3.1)
Lateral Thrust @160km/h N (100 mph lbs)	282 (63)	547 (123)
Wind Gust Rating km/h (mph)	No Ice	>240 (>150)
Torque @ 160km/h Nm (100mph ft-lbs)	342 (252)	1232 (987)

(1) Preset downtilt variations of 3 and 6 degrees are available in the CC450-06 and CC450-09 models. Simply add -T3 or -T6 at the end of the model number to order the respective tilt variation eg. CC450-09-T3-P. Please note: Tilt variants are NON-INVERTIBLE