

UHF Vertical Collinear Antennas

380-530 MHz

COL8, COL12

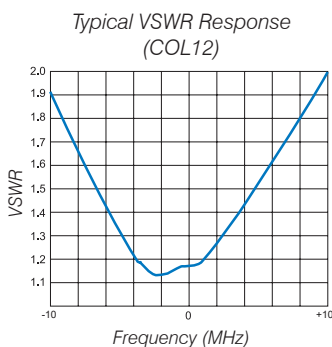


A range of high gain omnidirectional collinear antennas, the COL8 and COL12 are electrically identical and differ only in their physical construction.

An operating bandwidth of 10 MHz is provided within VSWR limits of less than 1.5:1, making them suitable for single and multi frequency applications. The antennas include internal DC grounding for lightning protection and the reduction of static noise.

Features:

- 6dBd gain omnidirectional pattern
- Range of models to cater for varying environments
- The radiating elements are constructed of alodined aluminium with all internal metal junctions welded to prevent the generation of intermodulation products and spurious emissions
- Model with heavy duty black fiberglass radomes to aid in ice shedding
- Integrated DC grounding for lightning protection and dissipation of providing static noise



Electrical Specifications

Model Number	COL8	COL12
Nominal Gain <i>dBi (dBd)</i>	8 (6)	
Frequency <i>MHz</i>	380 - 530	
Tuned Bandwidth <i>MHz</i>	10	
VSWR (<i>Return Loss</i>)	<1.5:1 (14dB)	
Nominal Impedance Ω	50	
Vertical Beamwidth $^\circ$	14	
Horizontal Beamwidth $^\circ$	Omni +/- 0.5dB	
Input Power <i>W</i>	200	

Mechanical Specifications

Model Number	COL8	COL12
Construction	Alodined aluminium elements with white fibreglass radome	Alodined aluminium elements with black ruggedised fibreglass radome
Length <i>m</i>	3.1	3.0
Weight <i>kg</i>	1.5	3.0
Termination	N female bulkhead	
Mounting Area <i>mm</i>	300mm x 38mm diam. alodined aluminium	500mm x 60mm diam. alodined aluminium
Suggested Clamps (<i>not included</i>)	2 x UC1	
Projected Area <i>cm</i> ²	No Ice	816
	With Ice	1746
WindThrust @ 160km/h <i>N</i>	97	193
Wind Gust Rating <i>km/h</i>	211	240
Torque @ 160km/h <i>Nm</i>	124	205

COL12 - E Plane

