

# VHF Vertical Collinear Antenna

144-175 MHz

COL17, COL3



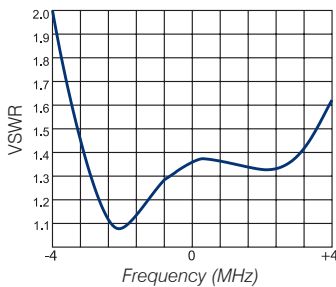
The 144-175 MHz COL range is a series of “cut to frequency” 3dBd gain vertical collinears. The range includes antennas suitable for simplex, duplex and rugged applications. All of the antennas include internal DC grounding for lightning protection and the reduction of static noise.

Drainage vents at the base allow the antennas to ‘breathe’ and thus prevent condensation build up. The alodine finish of the aluminium mounting tube provides a conductive surface which ensures effective earthing when mounted.

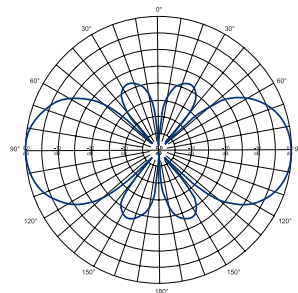
## Features:

- Models available with black radome for extreme climate conditions
- Consistent patterns across all models
- High power capability
- DC grounded for lightning protection and dissipation of static noise
- Minimal tower loading

Typical VSWR Response (COL17)



COL17 - E Plane



## Electrical Specifications

Model Number	COL17	COL3
Nominal Gain dBi (dBd)	5 (3)	
Frequency MHz	144-175	
Tuned Bandwidth	4.0%	
VSWR (Return Loss)	<1.5:1 (14dB)	
Nominal Impedance Ω	50	
Vertical Beamwidth°	38	
Horizontal Beamwidth°	Omni +/- 0.5dB	
Input Power W	200	

## Mechanical Specifications

Model Number	COL17	COL3
Construction	Alodined aluminium elements, White fiberglass radome	Alodined aluminium elements with ruggedised Black fibreglass radome
Length m	3.0	
Weight kg	3.2	4.2
Termination	N female bulkhead	
Mounting Area	500mm x 40mm diam. Alodined aluminium	500mm x 60mm diam. Alodined aluminium
Suggested Clamps	2 x UC1	
Projected Area cm <sup>2</sup>	No ice	1160
	With Ice	2045
Wind Load (Thrust) @ 160km/h N	137	218
Wind Gust Rating km/h	>240	
Torque @160km/h Nm	146	201