

# Unity Gain Broadband Dipole Antenna

400-520 MHz

COD4



The COD4 unity gain broadband dipole antenna is designed to cover the entire 400-470MHz & 450-520MHz frequency bands. Suitable applications include low power base stations and RF Control Stations in the emerging whole-of-government UHF frequency allocations, and other applications requiring a wide operating frequency bandwidth.

A unique circuit board radiator design provides a balanced and effective centre fed dipole radiator. As a centre fed antenna, not only is gain consistent across its entire frequency band but the vertical radiation pattern is stable in beam width, resulting in consistent performance across the entire frequency band.

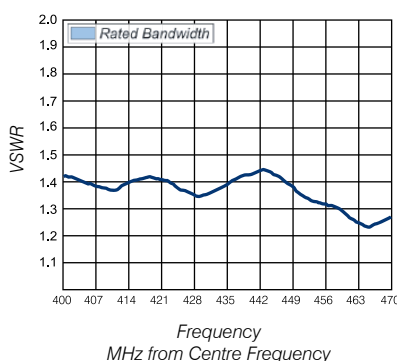
This antenna is internally DC grounded for optimum lightning protection and for the reduction of static noise, and is lightweight for easy installation on support structures.

## Features:

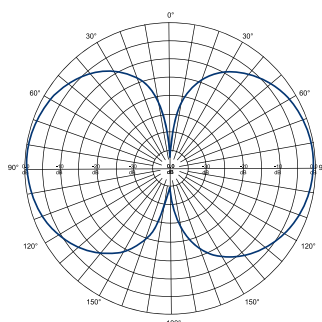
- Broadband - Covers the entire 400-470 MHz & 450-520 MHz bands without adjustment
- Consistent Gain – Circuit board radiator design provides consistent gain across the operating bandwidth
- Stable Beam Width – Vertical radiation pattern is stable across the entire frequency range
- Unity gain omnidirectional radiation pattern with excellent null-fill characteristics



Typical VSWR Response



Typical - E Plane



## Electrical Specifications

Model Number	COD4-4047	COD4-4552
Nominal Gain dBi (dBi)		0 (2.1)
Frequency MHz	400 - 470	450-520
Tuned Bandwidth MHz		Full
VSWR (Return Loss)		< 1.5:1
Nominal Impedance $\Omega$		50
Vertical Beamwidth°		83°
Horizontal Beamwidth°		Omni +/-0.5dB
Input Power W		100

## Mechanical Specifications

Model Number	COD4-4047	COD4-4552
Construction	White fibreglass composite PCB and Aluminium tube	
Length m		0.925
Weight kg		0.56
Termination		N series jack
Mounting Area mm		100mm x 25mm diam. alodined aluminium
Suggested Clamps (not included)		2 x UC1 or 2 x UB1
Projected Area cm <sup>2</sup>	No Ice	250
	With Ice	463
Wind load (Thrust) @ 160km/h		30
Torque Nm		8