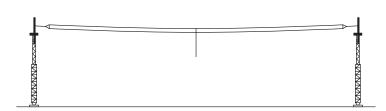
## **BASE ANTENNA**

## 411 TERMINATED FOLDED DIPOLE







Codan's 411 Terminated Folded Dipole Antenna is a 2-wire antenna designed for broadband operation in fixed stations. Separate variations are available to support power levels of 150 or 1000 W. Easy to install, the 411 Antenna can be mounted horizontally between two support systems, or as an inverted "V" using a single central support mast.

## **PERFORMANCE**

The 411 Antenna provides excellent performance for short to medium distance HF communications. It is offered in a range of lengths to suit installation requirements. To optimise the antenna for Near Vertical Incidence Skywave (NVIS) propagation use an inverted V configuration or adjust the installed height above ground. Designed and manufactured with corrosion and UV resistant materials to withstand all types of hostile environments.

## **EASY TO INSTALL**

The 411 Antenna is supplied completely assembled and ready for installation. Installation hardware includes 50 m of high quality UV resistant rope and pulley as well as easy to understand installation instructions. A range of coaxial cable lengths and types are available but are ordered separately. Codan also has a range of mast options that are suitable for use with the 411 Antenna.

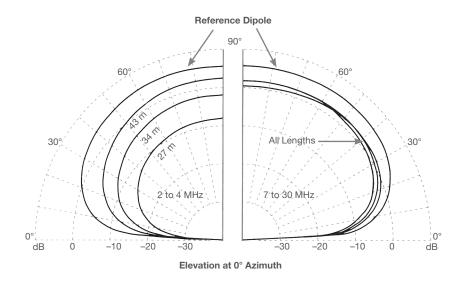
## ANTENNA MODEL

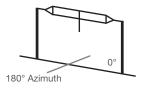
The model of 411 Antenna should be selected to suit the application depending on the required power rating and the maximum amount of available space to install it. As a general rule the radiation efficiency of the 411 Antenna increases with antenna length so it is recommended to select the longest variant that the installation site can accommodate.

MODEL	LENGTH (M)	POWER (W)
15-00411-003	43	150
15-00411-004	34	150
15-00411-005	27	150
15-00411-012	43	1000
15-00411-011	34	1000

#### Notes:

- 1. The 43m antenna is 10dB more efficient from 2 to 4 MHz than the 27m version.
- 2. The reference dipole is 1/4 wavelength above ground.
- 3. Radiation patterns are for antenna installation heights recommend in the antenna mounting details.





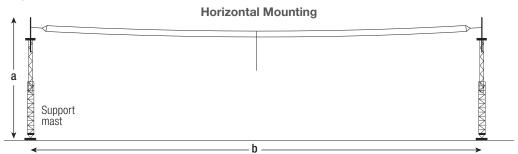
## **BASE ANTENNA**

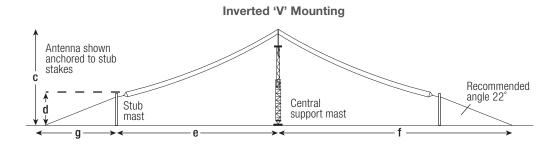
# 411 TERMINATED FOLDED DIPOLE COMMUNICATIONS





## ANTENNA INSTALLATION





Note: Antenna should be orientated at broadside to the preferred direction of communication to maximise signal level. Horizontal configuration should be used for medium to long distance communications, and inverted-V for short to medium distance.

## ANTENNA INSTALLATION DIMENSIONS

MODEL	DIMENSIONS (M)					
	а	b	С	d	е	f
15-00411-003/012	10	47	13	4.8	22	32
15-00411-004/011	8	38	11	4.2	18	27
15-00411-005	6.5	31	8	3	14.5	20

Note: Dimension 'b' allows 2 metres between each end of the antenna and the support mast.

#### **ACCESSORIES**

- 30m RG58 Coaxial Cable
- 100m low loss RG213 Coaxial Cable
- RG213 Strain Relief Hardware
- In-line Lightning Arrestor
- Spare waterproof UHF plug

## **COMPATIBLE MASTS**

- CT15 Telescopic Mast Note: The CT15 Mast is recommended for Inverted-V configurations only.
- 12 m & 15 m Guyed Masts
- 10 m Premium Guyed Mast

SPECIFICATIONS		PRACTICAL CRITERIA	
Frequency range	2 to 30 MHz	Distance, Tour to Antenna (m)	≤100 m
Connector	UHF type socket	Grounding requirements	None required
Input impedance	50 ohm	Footprint	See antenna installation dimension table
VSWR	Typically 2.5:1	Antenna Location	Suitable for ground or roof top installation
Power rating	150 W PEP, 100 W CW 1000 W PEP, 600 W CW		
Wind rating	160 km/hr		

Values noted are typical. Equipment descriptions and specifications subject to change without notice or obligation.

DATASHEET: Codan 411 Terminated Folded Dipole, 12-20054-EN, Issue 17, © 2023

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