



# Base Station Antennas

## 915 Single Wire Dipoles

Single wire dipole antennas, spot-tuned to the required operating frequency, are the most efficient antennas for use in HF base stations. They are simple to install and have a relatively narrow bandwidth and requires only minimal maintenance.

When several frequencies are required at a base station, several dipoles can be stacked one above the other between two towers. An antenna switch box BC91600 can be used to switch to the required dipole depending on the channel.

### General Specifications

Frequency range	500KHz - 30MHz
VSWR	Less than 1.5:1
Impedance	50 ohm
Construction	Stainless steel radiators

### Other Antenna Types

In addition to the antennas described in this brochure, we can supply other antenna systems including:

- Rotatable log periodics
- Deltas
- Rhombics
- Conical monopoles

Antenna systems can also be designed and manufactured to suit specific customer requirements.

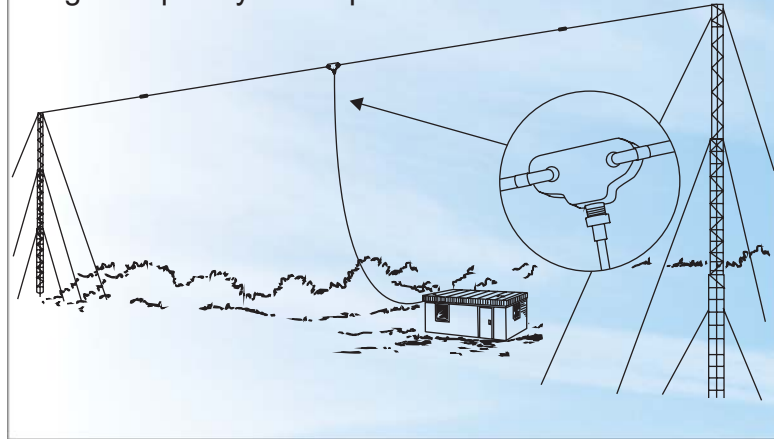


**Head Office:**  
Barrett Communications Pty Ltd P O Box 1214,  
Bibra Lake WA 6965 AUSTRALIA  
Toll Free Tel: 1800 999 580  
Tel: (618) 9434 1700 Fax: (618) 9418 6757  
email: [information@barrettcommunications.com.au](mailto:information@barrettcommunications.com.au)

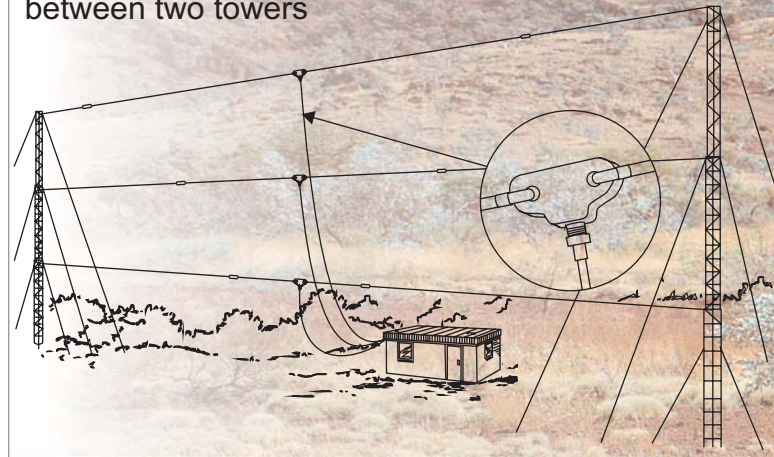
**European Office:**  
Barrett Europe Limited 19 Lenten Street Alton,  
Hampshire GU34 1HG - UNITED KINGDOM  
Tel: (44) 1420 542254 Fax: (44) 1420 543373  
email: [information@barreurope.co.uk](mailto:information@barreurope.co.uk)

**USA Office:**  
Barrett USA LLC 5676 Widmer Street,  
Shawnee Kansas 66216 USA  
Tel: +1 913 322 6231 Fax +1 913 273 0779  
email: [information@barrettusa.com](mailto:information@barrettusa.com)

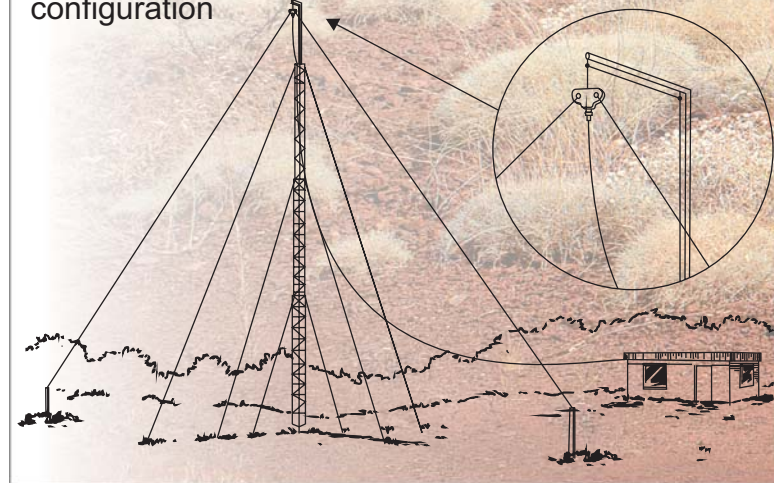
Single frequency wire dipole



Several single frequency wire dipoles positioned between two towers



Single frequency wire dipole in an inverted "V" configuration



Base Station Antennas

[www.barrettcommunications.com.au](http://www.barrettcommunications.com.au)



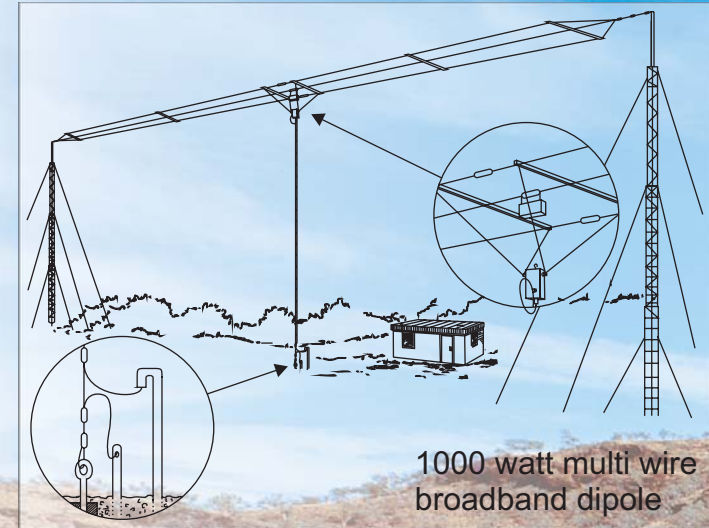
# Base Station Antennas

## 912 Series Broadband Dipoles

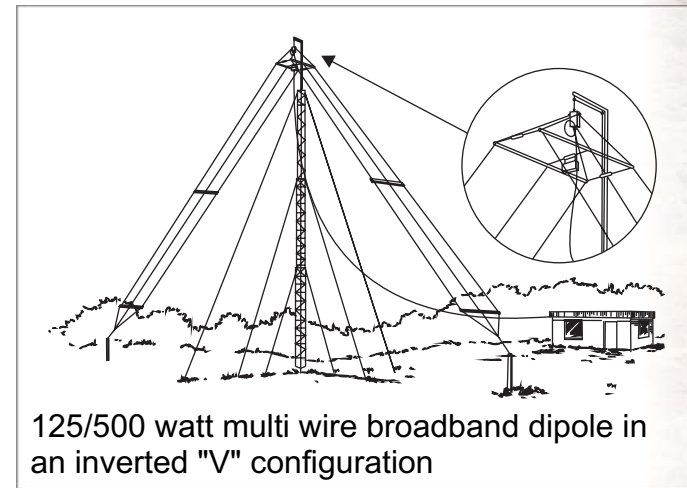
The Barrett 912 series of broadband base station antennas are designed for use in either an inverted "V" configuration using a single mast, or a standard dipole configuration between two masts.

In the inverted "V" configuration the 912 provides a more omni directional radiation pattern. All broadband antennas in the series are designed to provide optimum performance over a wide HF spectrum, without the need for antenna tuners.

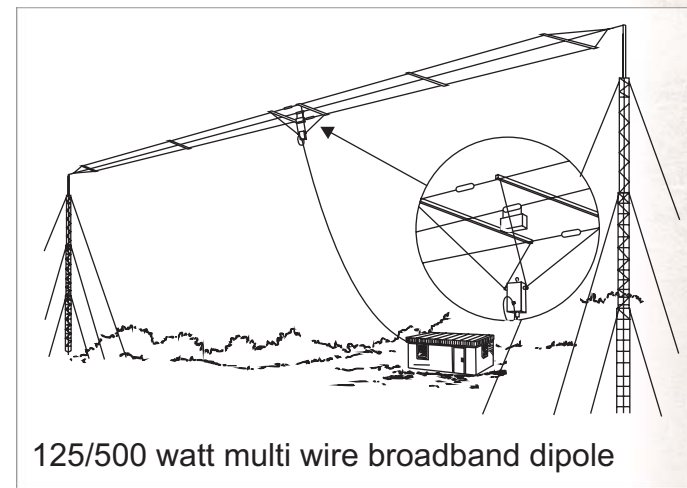
Using high quality stainless steel and glass reinforced composites the 912 series of broadband antennas are lightweight and corrosion resistant, but are able to withstand wind speeds in excess of 200km/h. The antennas are supplied complete with an inverted "v" mounting harness, 30 metres of coaxial cable and high quality waterproof connectors.



1000 watt multi wire broadband dipole

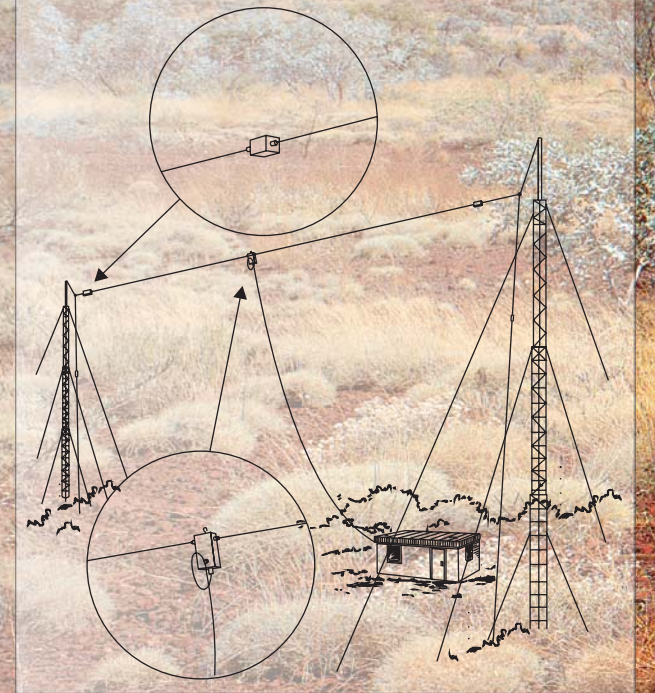


125/500 watt multi wire broadband dipole in an inverted "V" configuration



125/500 watt multi wire broadband dipole

125 watt single wire broadband dipole in a limited space configuration



# Base Station Antennas

MADE IN AUSTRALIA

BCB900ANT/5



AS/NZS  
ISO 9001:2000  
APPROVED  
BY BVQI



BARRETT COMMUNICATIONS 2000 SERIES



AS/NZS  
ISO 9001:2000  
APPROVED  
BY BVQI

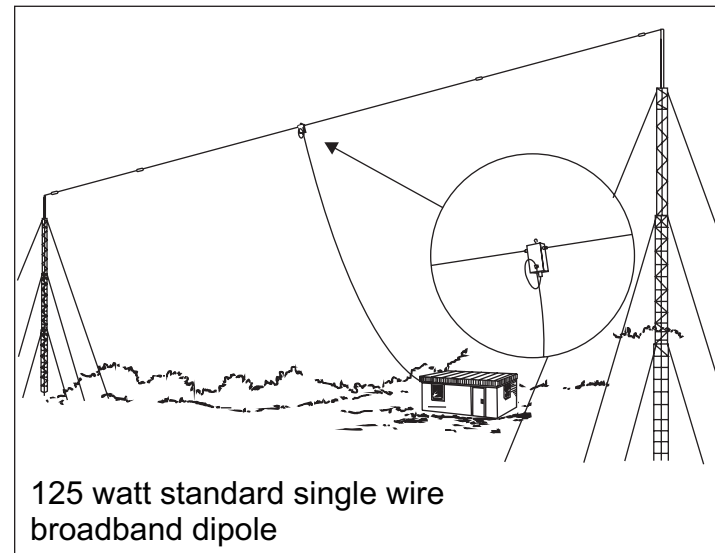
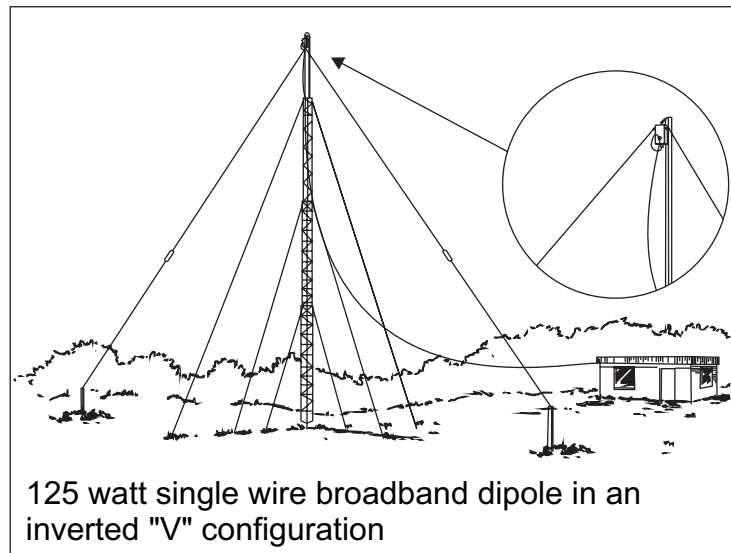


BARRETT COMMUNICATIONS 2000 SERIES

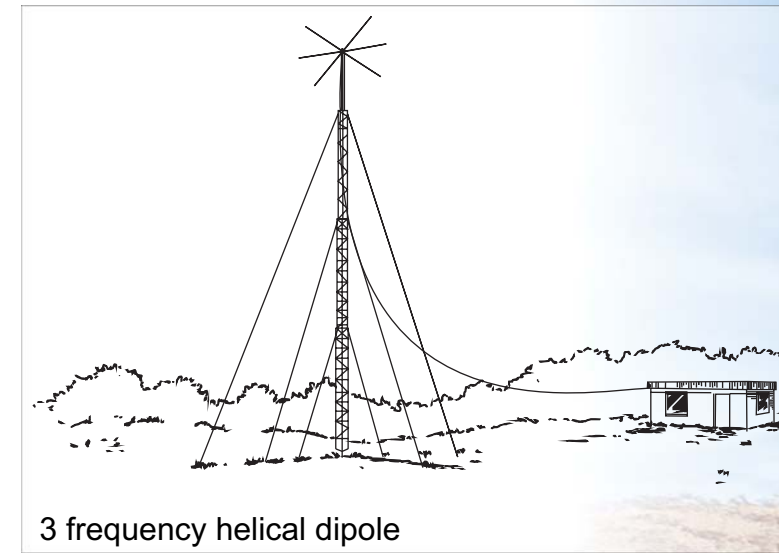


# Base Station Antennas

## 912 Series Broadband Dipoles



## 913 Series Helical Dipoles



### General Specifications

Frequency Range	2-30MHz
No of Frequencies	5 (Max)
VSWR	Less than 1.7: 1
Impedance	50 ohm

### Antenna Dimensions:

Overall	Standard 7 metres Optional 4 metres
Hub	Width 235mm Height 210mm Depth 50mm

### General Specifications

Frequency range	2 to 30 MHz
VSWR	Less than 2.5:1
Impedance	50ohm
Max Wind speed	207km/h

### BC91200 125 watt multi wire broadband dipole

Length insulator to insulator	28 metres
Width	1.3 metres
Power handling	125W CW, 250W PEP
Packed weight	6kg
Packed dimensions	1.4m x 150mm x 100mm

### BC91202 500 watt multi wire broadband dipole

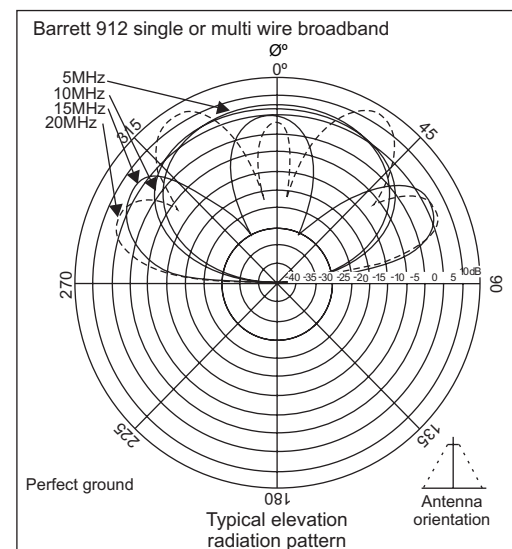
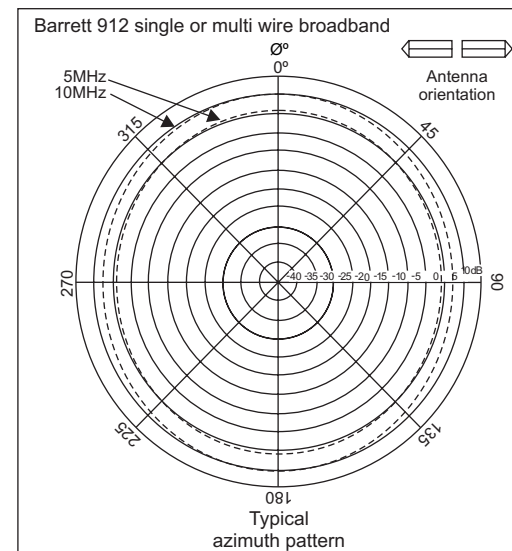
Length insulator to insulator	28 metres
Width	1.3 metres
Power handling	500W CW, 1250W PEP
Packed weight	13kg
Packed dimensions	1.4m x 300mm x 150mm

### BC91203 1000 watt multi wire broadband dipole

Length insulator to insulator	28 metres
Width	1.3 metres
Power handling	1000W CW, 2500W PEP
Packed weight	20kg
Packed dimensions	1.4m x 300mm x 150mm

### BC91201 125 watt single wire broadband dipole

Length insulator to insulator	48 metres
Width	n/a
Power handling	125W CW, 250W PEP
Packed weight	2kg
Packed dimensions	250mm x 300mm x 75mm

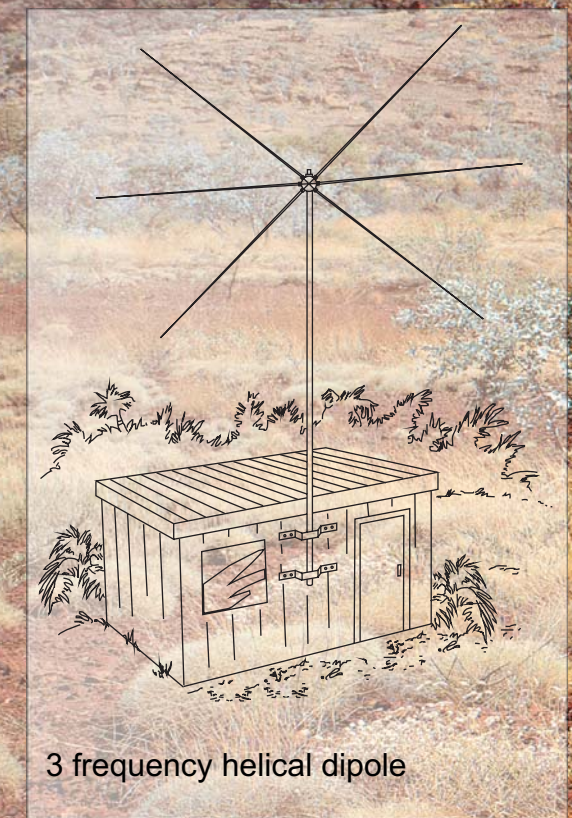
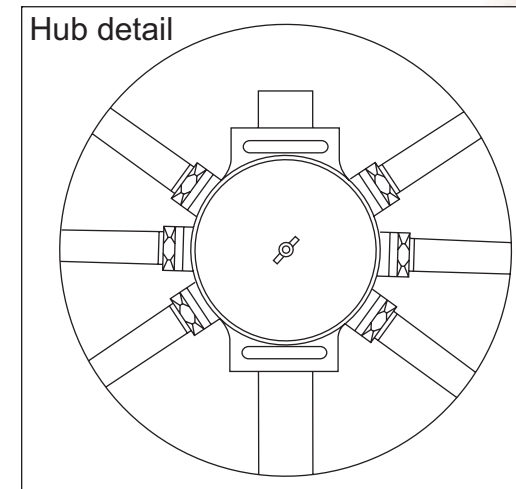


The Barrett 913 series helical dipole antenna is designed for use in base station installations where the use of wire dipoles or broadband antennas is impractical.

The construction and ease of assembly make the 913 series ideally suited to sites where space is restricted or where it may be necessary to periodically dismantle in order to relocate a temporary base station. In environments where manmade noise causes a problem when using a broadband antenna, signal to noise ratio is improved by the narrow bandwidth characteristics of the 913 helical dipole.

The hub is designed to be mounted on either a 50mm diameter support mast or an existing tower. The antenna comes complete with 30 metres of RG58 coaxial cable and high quality C32-21 waterproof connectors.

Barrett 913 antennas are ready to erect, in kit form, with threaded mounting bolts which attach directly to the central hub.



3 frequency helical dipole

# Base Station Antennas